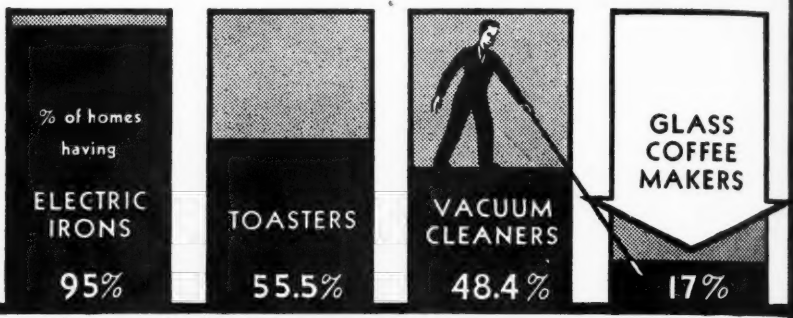
Public Utilities

FORTNIGHTLY

March 27, 1941

PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS

HERE'S A WIDE OPEN MARKET!

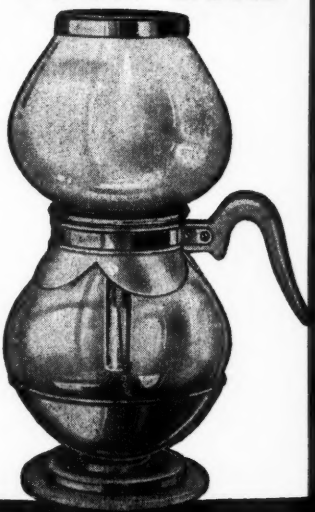


AND EVERY SILEX placed on your line ADDS 87 KWH TO YOUR LOAD

Here is load-building opportunity! Trade magazine surveys indicate a 23% gain in glass coffee maker purchases for 1941!

And every SILEX user plugs it in two, three or more times EVERY DAY! A SILEX placed on your line adds 87 KWH to your load . . . more than any other electric appliance except a roaster!

1941 is a load-building year . . . a SILEX year! Display Genuine SILEX . . . feature SILEX in your promotions . . . watch your load climb!



THE SILEX COMPANY *Dept. U3* HARTFORD, CONN.
Creators of the Glass Coffee Maker Industry

*TRADE MARK REG.

Push Genuine SILEX* and watch your load climb

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Editor—HENRY C. SPURR
Associate Editors—ELLSWORTH NICHOLS, FRANCIS X. WELCH, NEIL H. DUFFY
Financial Editor—OWEN ELY

Public Utilities Fortnightly

VOLUME XXVII *March 27, 1941* NUMBER 7

Contents of previous issues of PUBLIC UTILITIES FORTNIGHTLY *can be found by consulting the "Industrial Arts Index" in your library.*

¶ *This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.*

PUBLIC UTILITIES REPORTS, INC., PUBLISHERS
Publication Office ..... CANDLER BUILDING, BALTIMORE, MD.
Executive, Editorial, and Advertising Offices ..... MUNSEY BUILDING, WASHINGTON, D. C.

PUBLIC UTILITIES FORTNIGHTLY, a magazine dealing with the problems of utility regulation and allied topics, including also decisions of the regulatory commissions and courts, preprinted from *Public Utilities Reports, New Series*, such Reports being supported in part by those conducting public utility service, manufacturers, bankers, accountants, and other users. Entered as second-class matter April 29, 1915, under the Act of March 3, 1879. Entered at the Post Office at Baltimore. Md., Dec. 31, 1936; copyrighted, 1941, by Public Utilities Reports, Inc. Printed in U. S. A.

PRICE, 75 CENTS A COPY ANNUAL SUBSCRIPTION, $15.00

Pages with the Editors

MARK off another utility on the score of those industries of public service which have been made glamorous by Hollywood. You have doubtless already witnessed the historical spectacle of the discovery of the telephone by Don Ameche disguised as Dr. Alexander Graham Bell, and the double impersonations of Thomas A. Edison by Mickey Rooney and Spencer Tracy, respectively. Then there was the technicolor saga of the transcontinental railroad in the film "Union Pacific." Also, we have a rather vague recollection of another American railroad, the Erie canal, and the Suez being portrayed in the cinema.

THE latest utility to make its bow under the Hollywood Kleig lights is the telegraph industry in a film entitled "Western Union." We witnessed the première of this epic and came away with the impression that it was not so much a picture about Western Union as it was a regular Wild West show concerned with a misunderstanding between outlaw rustlers, masquerading as Confederate guerrillas, and a surveying party which, incidentally, happened to be engaged in stringing wires for the first transcontinental telegraph system. There are also complications from hostile Indians.

NOT pretending to assume the prerogatives of a dramatic reviewer, we leave to more regular movie-goers the verdict on the merits of "Western Union." Our only point in bringing it up was to note wistfully that pretty soon Hollywood is going to run out of utility industries, which is perhaps too bad but certainly inevitable. From last accounts, the gas industry, street cars, busses, and the Wright Brothers are about all we have left who have never submitted to a screen test. As for radio and television—well, they are just too young, industrially speaking, to be getting such conceited ideas.

*

THAT might suggest the question: How old is the electric industry? Theoretically, it probably goes back beyond the discoveries of Gramme, Ampere, Faraday, the Leyden jars, and even Benjamin Franklin's kite string. But if one had to pick some definite year as marking the beginning of practical experience, the year 1876 has its qualifications. For reasons, see the review of a recent volume on the history of the General Electric Company in this issue (page 427).

HENRY L. GRAY

Years of experience convince him that an actual cost rate base would settle the depreciation argument.

(SEE PAGE 401)

PROBABLY a much more difficult task would be determining how old is regulation. State commissions often date state utility regulation from the year 1907 when the first full-strength public service commission laws were enacted in New York and Wisconsin. But the record of the Interstate Commerce Commission goes back much further than that; and scholarly textbooks trace common law rate control and common carrier regulation back to the reign of King James I of England.

A MORE practical question would be: What has American experience in regulation produced in the form of consistent policy and procedure? HENRY L. GRAY, well-known valuation expert and consulting engineer of Seattle, Washington, gives us his impression of the progress which regulatory science, such as it is, has made with respect to the single subject, depreciation. (See page 401.)

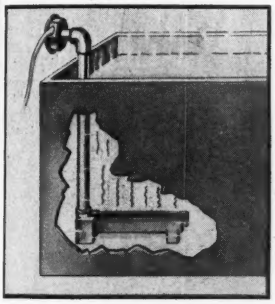
MR. GRAY, author of this depreciation article, is a native of Missouri, who received his education as an engineer at the university of that state. He went to Seattle in 1905 as an engineer on the Pacific coast extension of the Milwaukee railroad and has remained in the

dustry needs MORE ELECTRIC HEA

THEY COULD DO IT IN 24 HOURS WITH

CHROMALOX

ELECTRIC HEATING UNITS



ONLY A FEW MINUTES

needed to connect this Chromalox immersion heater to the nearest electric line and drop it into this tank to keep cleaning solution hot. Heater blades are sheathed in any metal needed to defeat corrosion. Temperature uniformly assured.

Every problem like this offers you a chance to add new profitable load with electric heat. Many a manufacturer hesitates to make a much-needed shift of steam-heated equipment because of production tie-up. You can tell him how to do it easily and quickly, avoiding the time loss in planning and connecting up steam piping, by using Chromalox electric heating units in place of steam coils.

Manufacturers everywhere are hungry for ideas that will help them boost production. Chromalox electric heat is the simple answer in scores of cases. Wiegand engineers have at their finger-tips voluminous data on electric heat applications, and are ready to work with you in meeting specific problems.

Chromalox electric heating units are available in types, sizes and ratings for any application requiring temperature up to 1000 deg. F.

EDWIN L. WIEGAND COMPANY

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CHROMALOX

The load builder

state of Washington since that time, during which period he served as chief engineer on the regulatory commission of that state until 1913. Since that date he has been engaged in pr.vate practice.

BECAUSE he is a sort of distinguished alumnus who has passed from the confines of our editorial jurisdiction, we naturally follow the doings of Wendell Willkie with a patronly interest. Consequently, we have been puzzled by one aspect of the publicity which attended his recent clipper dash to England for the Spirit of H. R. 1776. It has nothing to do with foreign policy or domestic politics. It is simply this:

THE press seems to be assiduously spreading the idea that Mr. Willkie is a drinking man. Oh, we don't mean that in the alcoholic sense. We refer to beverages in general.

AT first we were not disturbed when reports came of Mr. Willkie having tea with this, that, and the other Important Personage. After all, visiting Americans must expect the inevitable ritual of the British tea. And the reason may be suggested by the stale but cynical query: "Did you ever taste their coffee?" That's just the point. Mr. Willkie *did* taste their coffee and the press made much ado about it. It detailed faithfully Mr. Willkie's acceptance of an invitation by an humble cave-dweller in a London shelter to taste his coffee. Mr. Willkie's observation that it was very good coffee—as good as he had tasted in America—was painstakingly recorded at press cable rates.

THEN came the beer incident. Scarcely had he disembarked from the clipper when the avid press wanted to know about British beer. He said it was good. One journalistic Iago tried to dagger the Willkie hide to the barn door of the American brewing industry by asking if the British brew were better than our own. But politically wise Mr. Willkie deftly sidestepped that with an innocuous insistence that the English beer was very good indeed. Mystery shrouds the nature of the libation consumed at the historic Willkie-De Valera luncheon. But it wouldn't surprise us to find some journalistic observation that Irishmen in their native habitat have never been noted for guzzling great quantities of *aqua pura*.

Now, what we want to know, Mr. Willkie, is: What in the world did you get to *eat* over there?

ALSO in this issue are two articles by Washington newspaper correspondents. In the opening piece HERBERT COREY tells us about a surprising recent trend in the Federal administration in inland waterway shipping. ANDREW BARNES gives us a preview of the legislative technique which may be employed to put over the revived St. Lawrence seaway-power proposal.

HERBERT COREY

Has the inland waterway transportation service of the Federal government undergone a change of heart?

(SEE PAGE 387)

AMONG the important decisions preprinted from *Public Utilities Reports* in the back of this number, may be found the following:

THE Securities and Exchange Commission, although permitting the issuance of securities by a subsidiary of a registered holding company, has declared its policy for the future as opposed to approving securities even for refunding purposes when debt ratios are unsatisfactory. (See page 65.)

THE limited jurisdiction of the Tennessee commission over a nonprofit cooperative or electric membership corporation is discussed by the commission in denying a petition by customers of such nonprofit cooperatives or membership corporations for an order requiring service from a company-owned electric utility. (See page 98.)

MAINTENANCE and depreciation expenses are allowed as operating expenses in connection with property constructed by contributions of customers, where the property so constructed belongs to the company, and the company is charged with the cost of maintenance and replacements. (See page 106.)

THE next number of this magazine will be out April 10th.

The Editors

In This Issue

In Feature Articles

In Financial News

In What Others Think

In The March of Events

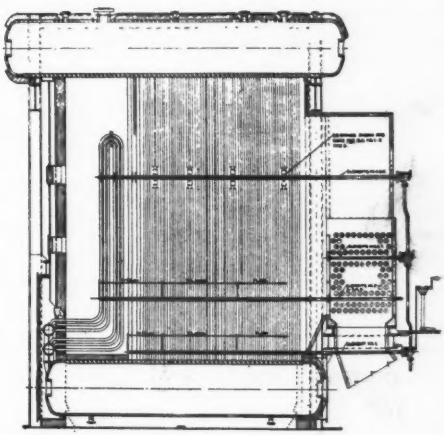
In The Latest Utility Rulings

PREPRINTS FROM PUBLIC UTILITIES REPORTS

Various regulatory rulings by courts and commissions reported in full text, pages 65–128, from 37 PUR(NS)

Another Example of VULCAN VERSATILITY *in Soot Blower Design*

Vulcan unit makes notable 4 year record in latest design, twin furnace Foster Wheeler steam generator installation at Oil City, Pa., station of the Keystone Public Service Company, operating on fuel relatively high in ash having a low fusion point.



Vulcan unit in twin-furnace Foster Wheeler steam generator completes 4 years' service with NO TROUBLE AND NO MAINTENANCE.

... This despite unusual problems presented by novel boiler and furnace design.

... As the drawing shows it was impracticable to install soot blowers from the front of the boiler as the furnace construction precluded installation of conventional type of elements and bearings to provide necessary protection and support.

... Hence, entry was made at the back necessitating carrying the elements a distance of about 26 ft., through the economizer and boiler tube banks to the superheater.

... Passage through high temperature, intermediate temperature and relatively low temperature zones, plus the factor of exceptional length, greatly complicated the problems of securing adequate thermal protection, dependable support, and at the same time provide for expansion and contraction without danger of cutting tubes.

Solution was found by using HyVULoy element section for the high temperature area, VULcrom element for the intermediate, with the balance steel; and providing specially designed bearings to hold the members in such a way as to eliminate hazard of tube-cutting and directed expansion toward the back of the boiler, where it could be taken up by a suitable expansion joint.

... Because of the advanced design of this boiler involving new features in soot-blower design and construction, Vulcan engineers inspected the installation monthly for many months, but the engineering was so sound that no trouble of any kind developed—Results—Perfect Operation—Perfect Cleaning—Reasonable Cost —And—VULCAN SOOT BLOWERS WERE SPECIFIED when a duplicate Foster Wheeler twin furnace steam generator was recently ordered by Keystone Public Service Company.

... Whatever the characteristics of your boiler and setting, fuel, or load, Vulcan engineers can successfully solve any soot blower installation and operating problem involved. We invite your consideration of Vulcan service with respect to any soot blower need.

VULCAN SOOT BLOWER CORPORATION

DU BOIS, PENNSYLVANIA

Remarkable Remarks

"There never was in the world two opinions alike."
—MONTAIGNE

JESSE H. JONES
Secretary of Commerce.

"We have no boom and I hope we never have another. Prosperity is hard to stand."

FRANCIS T. McNAMARA
Consulting engineer, Connecticut Public Utilities Commission.

"We may face meatless and wheatless days, but there probably will be no lightless days."

JOHN W. HANES
Former Under-Secretary of the Treasury.

"I am confident that the normal budget of the Federal government can be reduced by a minimum of $1,000,000,000 per annum."

J. J. PELLEY
President, Association of American Railroads.

"Taxes [on railroads] in 1940 were the highest for any year on record, amounting to $405,000,000, or a daily average of $1,107,000."

EMMETT F. CONNELY
President, Investment Bankers Association of America.

"Regulation is never static. It increases like a snowball. There seems no end to broadening the scope and strengthening the power."

EX-CHAIRMAN JEROME N. FRANK
Introducing SEC testimony before House Appropriations Committee.

"Now, Mr. Chairman, . . . at the risk of having you say to yourselves, 'Here comes another one of those time-worn national-defense stories,' . . . "

J. F. DEASY
Vice president in charge of operation, Pennsylvania Railroad.

"When transportation service is required in astronomical quantities, whether in war or peace, the railroads leave other agencies of service almost out of the picture."

FRANKLIN DELANO ROOSEVELT

"I would ask no one to defend a democracy which in turn would not defend everyone in the nation against want and privation. The strength of this nation shall not be diluted by the failure of the government to protect the economic well-being of all citizens."

HAROLD L. ICKES
Secretary of the Interior.

"We are rich in resources because we have put our house in order. Our natural wealth forms the sinews and muscles of our defense machinery. We will continue to administer prudently our resources for present use and for defense when we must, and guard them for the future, always."

ALFRED P. SLOAN, JR.
Chairman, General Motors Corporation.

"One of the greatest contributions which labor leaders today can make to our national defense efforts is to exercise their restraining influence upon the rank and file against demanding wage increases."

C. M. CHESTER
Chairman, General Foods Corporation.

" . . . we need an economic gospel. That is our proven need. We need a modern handbook relating, in orderly sequence, the operations and effects of the system of private enterprise on the lives of our people."

DANIEL WILLARD
President, Baltimore & Ohio-Alton System.

"While no one would claim our system of government is perfect, I believe that, whatever its imperfections, it has brought more happiness to those who live under it than has any other kind of government on earth."

H. W. PRENTIS, JR.
President, Armstrong Cork Company.

"Unfortunately, . . . the great bulk of those who believe in American principles are relatively inarticulate, while those who seek to undermine our American system are cleverly and effectively proclaiming their theories from every housetop."

EDITORIAL STATEMENT
Industrial News Review.

"If political candidates who so vociferously advocate electric power 'for the people, by the people,' should suddenly switch to an equally exuberant revelation of the actual accomplishments of the private utilities, the voters would be convinced in short order that we have been living in an electric Utopia all along and didn't know it."

EDWIN S. SMITH
Member, National Labor Relations Board.

"To sound a retreat for labor at the present time from this vantage point which it has gained would signify not only to labor but to liberal opinion generally a dangerous retrogression from democracy. In view of the general assault upon the democratic processes which is taking place upon a world-wide scale, it would seem the better part of prudence and statesmanship to continue undisturbed during the national defense period and thereafter the civil guaranties which the Wagner Act has given to industrial workers and which had been so long denied them."

DAN HARGRAVES
Writing in The Nation.

"Despite the development of large public power projects in recent years, there exists a real danger of a production bottle-neck at the point of power supply. National power production is now reaching a new all-time high. Many utilities are announcing, with appropriate fanfare, the expansion of their power facilities to take care of defense needs. Under the circumstances, the question may well be asked whether the zeal of privately owned utilities to keep their commercial lighting loads at present levels does not work against a sound public policy of power conservation."

Safeguard Equipment Outlay with R&IE METAL ENCLOSED BUS

R&IE bus provides individual housings for each conductor with air space between-thus preventing interphase shorts and limiting any trouble to ground faults. The air space also promotes cooling.

R&IE bus provides ample strength to resist short circuit stresses. These stresses are taken by the mounting frames in which the insulators are subjected to compression loading only.

R&IE bus covers are housings only and not strength members. These housings can be gasketed to keep out dirt and moisture.

R&IE bus can be mounted on floor, wall, or ceiling and is readily fitted to a structural steel mounting.

R&IE bus can be installed, aligned, adjusted and tested, and then the housings put on. Conversely the housings can be taken off for inspection by removing a minimum number of bolts.

R&IE bus can compete in price and in low cost of erection with any other type of bus structure and also give the above distinct advantages.

RAILWAY AND INDUSTRIAL ENGINEERING CO.

GREENSBURG, PA. . . In Canada, Eastern Power Devices, Ltd., Toronto

IN HUNDREDS OF UTILITY AND PRIVATELY-OWNED FLEETS—IT'S EXIDE

PEACE of mind is not something that can be purchased in the ordinary sense of the word.

Nevertheless, hundreds of fleet operators whose buses, trucks or company cars must be on the road at any time and under all conditions, have ceased to worry about cranking and lighting failures since installing Exide Batteries.

It is mighty gratifying to know that the batteries which Exide recommends for a particular job of cranking or lighting, can be depended upon to do that job satisfactorily without coddling, under the most severe conditions. Case records provide evidence of fleet owners operating hundreds of vehicles, who have received an average of 125,000, 175,000 and even 200,000 miles per battery.

Why not equip *your* company's vehicles with Exides? Our free booklet, "Battery Operating Instructions," is yours for the asking . . . and it may help you arrive at a decision.

Exide BATTERIES

THE ELECTRIC STORAGE BATTERY CO.

The World's Largest Manufacturers of Storage Batteries for Every Purpose

PHILADELPHIA

Exide Batteries of Canada, Limited, Toronto

Lightning study in miniatur

BUILT for the purpose of studying effects of lightning, this miniature transmission line will help point the way to further improvements in protective methods. Westinghouse is continually looking ahead both in the laboratory and in the field to develop new and better equipment to serve you and your customers. An outstanding development resulting from this intensive research is the new LV Autovalve Lightning Arrester which gives greater protection for distribution lines by its ability to handle lightning surges of both long and short duration.

Westinghouse activities in research, in the manufacture, distribution and application of apparatus, and in promoting the use of electricity, result in better service to you and a wider use of electricity by your customers. They have been made possible and are continually encouraged by your purchases of Westinghouse apparatus.

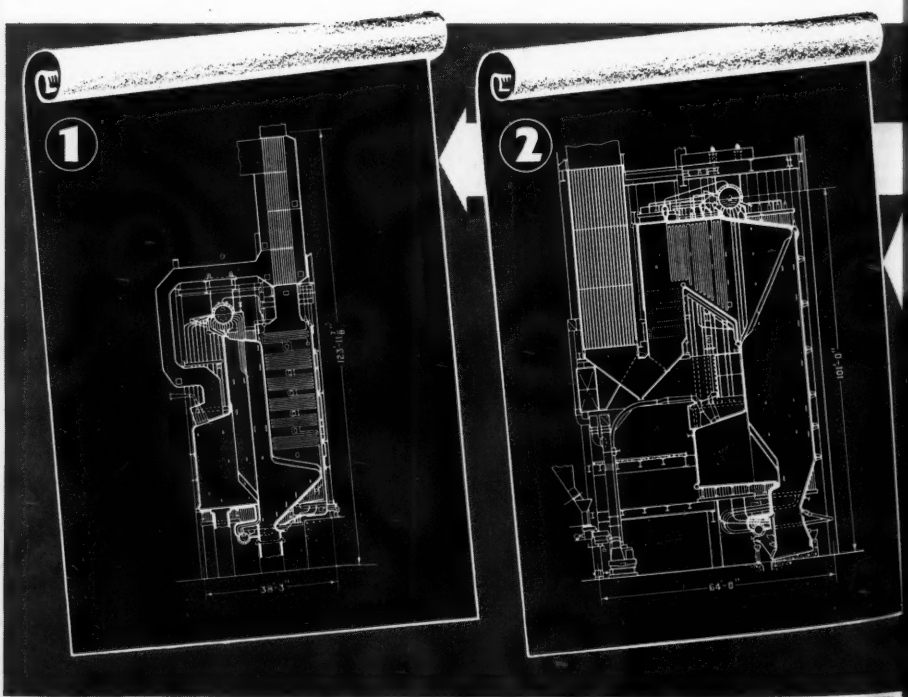
WESTINGHOUSE ELECTRIC & MANUFACTURING COMPANY, EAST PITTSBURGH, PA.

Westinghouse

ELECTRICAL PARTNER OF THE CENTRAL STATION INDUSTRY

W WESTINGHOUSE ELECTRIC

Statistics and Trends of Central-Station Boilers



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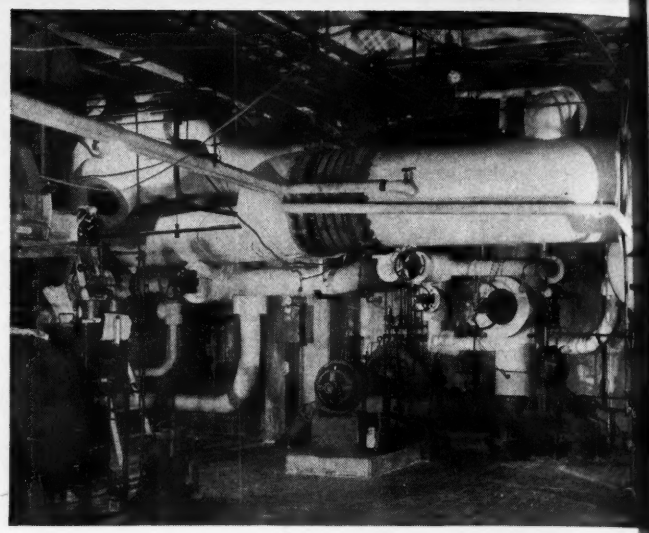
DOES YOUR INSULATION INVESTMENT PAY A *FULL* RETURN?

N FURNACES where insulation is quired to resist temperatures up 1900° F., J-M Superex is widely cognized as the most efficient ock insulation available today. ndreds of installations prove its ng life and low maintenance.



FOR TEMPERATURES UP TO 600° F., you save by using J-M 85% Magnesia. For years the standard material for insulating power-plant equipment and steam lines, it combines light weight with permanently high insulating efficiency.

OW MUCH MONEY you spend on fuel depends to a large tent on the answers to these two questions:

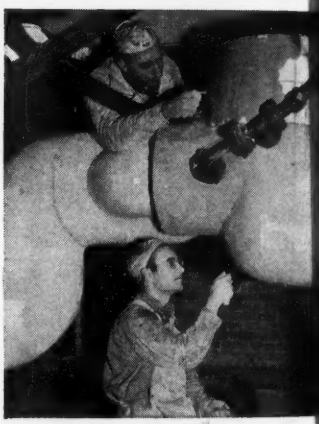
Are you using the *correct insulating materials*?

Are they applied in the *correct thicknesses*?

To assure every saving possible with insulation, it will pay u to call in a J-M Insulation Engineer. Let him study ur requirements . . . his specialized technical training and perience will help you trace down and correct sources of at waste that may otherwise go unnoticed.

From the complete line of J-M Insulations, he can recom- nd exactly the *material* you need for greatest efficiency . exactly the *thickness* you need for maximum returns.

For full details on this helpful service and facts about the nplete line of J-M Industrial Insulations, write to Johns- anville, 22 East 40th Street, New York, N. Y.

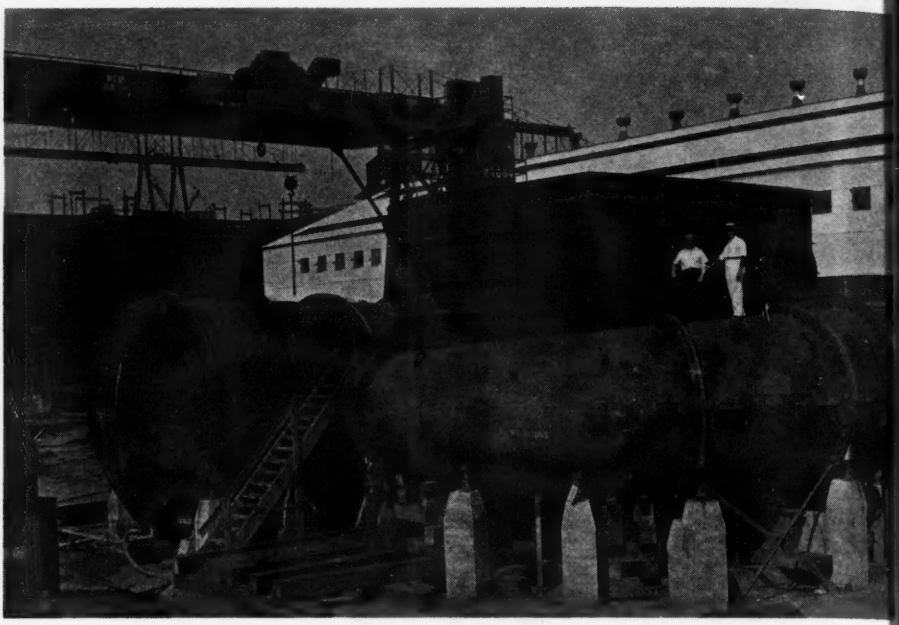


ON SUPERHEATED STEAM LINES, Johns-Manville Superex Combination Insulation provides an effective safeguard against costly heat waste. Built up of an inner layer of Superex and an outer layer of 85% Magnesia, this combination assures maximum heat resistance and insulating efficiency.

Johns-Manville INDUSTRIAL INSULATIONS

FOR EVERY TEMPERATURE . . . FOR EVERY SERVICE . . .

Superex . . . 85% Magnesia . . . JM-20 Brick . . . Sil-O-Cel C-22 Brick . . . Sil-O-Cel Natural Brick . . . J-M No. 500 Cement . . . Sil-O-Cel C-3 Concrete . . . Marinite



150,000 HP Francis Turbine for Grand Coulee Project

(SHOP HYDROSTATIC TEST—230 LB. PER SQ. IN.)

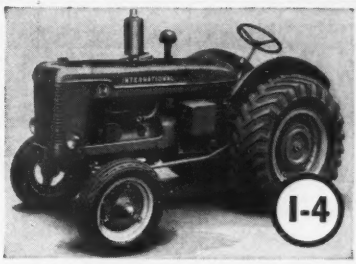
HYDRAULIC TURBINES
FRANCIS AND HIGH SPEED
RUNNERS
BUTTERFLY VALVES
POWER OPERATED RACK RAKES
GATES AND GATE HOISTS
ELECTRICALLY WELDED RACKS

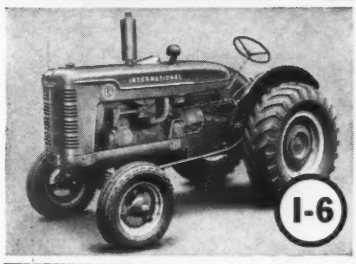
Newport News Shipbuilding and Dry Dock Company
(Hydraulic Turbine Division)
Newport News, Virginia

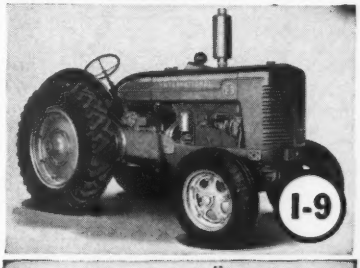
5 NEW INTERNATIONAL Industrial WHEEL Tractors

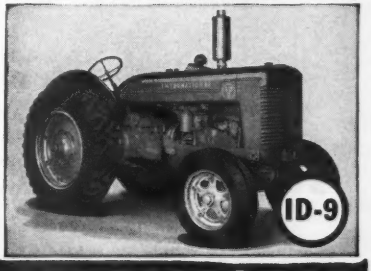
International Harvester announces five *brand-new* International Industrial WHEEL Tractors —three with carburetor-type engines, two with easy-starting *full* Diesel engines. Ask the nearest International Industrial Power dealer or Company-owned branch about these tractors and how adaptable they are in the public utilities field—for handling materials in shops, pulling trailer trains, laying and pulling cable, stringing lines, operating cranes and hoists, and for snow removal.

INTERNATIONAL HARVESTER COMPANY
180 North Michigan Avenue Chicago, Illinois









"I" Tractor Facts

I-4—4-cylinder valve-in-head gasoline engine. Bore and stroke 3⅜ x 4¼ in. 5 forward speeds up to 15 m.p.h. Develops 29.5 engine h.p. at 1,650 r.p.m.

I-6—4-cylinder, valve-in-head gasoline engine. Bore and stroke 3⅞ x 5¼ in. 5 forward speeds up to 14 m.p.h. Develops 40.5 engine h.p. at 1,450 r.p.m.

ID-6 DIESEL—Quick-starting, 4-cylinder, compression-ignition, 4-cycle Diesel engine. Bore and stroke 3⅞ x 5¼ in. 5 forward speeds up to 14 m.p.h. Develops 38.5 engine h.p. at 1,450 r.p.m.

I-9—4-cylinder, valve-in-head gasoline engine. Bore and stroke 4.4 x 5.5 in. 5 forward speeds up to 15 m.p.h. Develops 54 engine h.p. at 1,500 r.p.m.

ID-9 DIESEL—Quick-starting, 4-cylinder, compression-ignition, 4-cycle Diesel engine. Bore and stroke 4.4 x 5.5 in. 5 forward speeds up to 15 m.p.h. Develops 51.5 engine h.p. at 1,500 r.p.m.

INTERNATIONAL HARVESTER

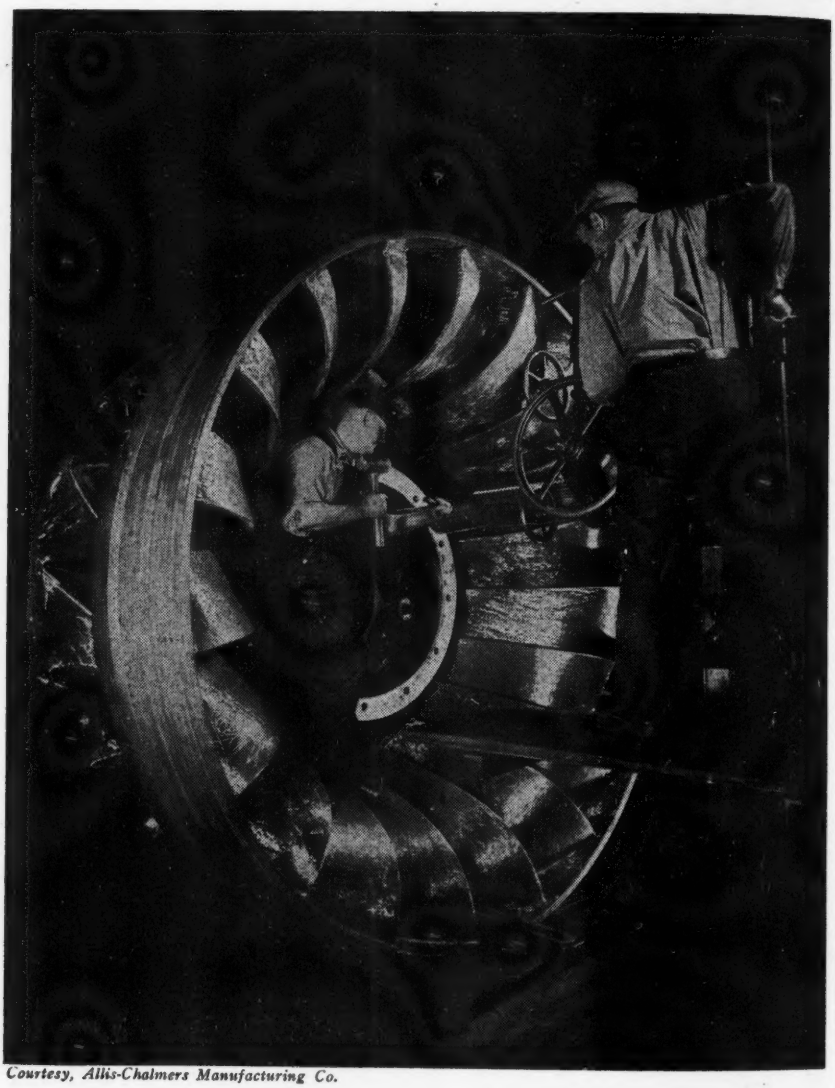
Utilities Almanack

MARCH

27	Th	¶ *Northwest Electric Light and Power Asso. starts meeting, Spokane, Wash., 1941.* ¶ *Kansas Telephone Association begins convention, Topeka, Kan., 1941.*
28	F	¶ *Mid-West Gas Association will hold meeting, Minneapolis, Minn., Apr. 14–16, 1941.*
29	Sa	¶ *Iowa Independent Telephone Association will convene, Des Moines, Iowa, Apr. 15–17, 1941.*
30	S	¶ *Electrochemical Society will hold spring meeting, Cleveland, Ohio, Apr. 16–19, 1941.*
31	M	¶ *Edison Electric Institute starts annual sales conference, Chicago, Ill., 1941.*

APRIL

1	Tu	¶ *American Society of Mechanical Engineers opens spring meeting, Atlanta, Ga., 1941.*
2	W	¶ *New England Transit Club holds meeting, Boston, Mass., 1941.*
3	Th	¶ *American Gas Association will hold distribution conference, Pittsburgh, Pa., Apr. 21–23, 1941.*
4	F	¶ *Greater New York Safety Council will hold convention and exhibit, New York, N. Y., Apr. 22–25, 1941.*
5	Sa	¶ *Missouri Association of Public Utilities will hold annual convention, Excelsior Springs, Mo., Apr. 23–25, 1941.*
6	S	¶ *Chamber of Commerce of the United States of America will hold annual meeting, Washington, D. C., Apr. 28–May 1, 1941.*
7	M	¶ *American Gas Association and Edison Electric Institute start National Accounting Conference, Cincinnati, Ohio, 1941.*
8	Tu	¶ *Nebraska Telephone Association starts meeting, Lincoln, Neb., 1941.*
9	W	¶ *Midwest Power Conference starts annual meeting, Chicago, Ill., 1941.* ¶ *American Transit Asso., Bus Division, starts regional conference, Dallas, Tex., 1941.*



Courtesy, Allis-Chalmers Manufacturing Co.

Streamlining the Old Mill Wheel

Public Utilities
FORTNIGHTLY

VOL. XXVII; No. 7 MARCH 27, 1941

Santa Claus on the Waters

How Uncle Sam subsidized competition with the railroads at the expense of taxpayers

BY HERBERT COREY

AN extraordinary thing has happened. Or it seems to have happened. This reporter may have been taken by delusions, or he may have been the prey of a set of informers who have gone quietly insane. But the fact about to be reported is odd. If it is not odd, then an ordinary household occurrence is to have a porcupine as a bedmate. This is the fact:

The Inland Waterways Corporation has turned sweet. It is no longer bellowing down the waterways against the railroads. It is coöperating with them. It is behaving like a mere transportation outfit instead of like a Sir Lancelot whose Guinevere has been playing with the neighbors' children. This interlude of calm may not be lasting. President Chester Thompson may hoist the black flag over his power barges. Secretary of Commerce Jesse Jones, who is Mr. Thompson's immediate superior, may order him to man the antirailroad guns on the poop deck and go into action. That does not seem likely, for Mr. Jones is a banker, a business man, boiled eight minutes, and as head of the Loan Department of the United States has aided many a needy railroad with cash. Many other things might happen. But for the moment it can be reported that the Inland Waterways Corporation is not in eruption.

It is making rates in coöperation with the railroads. In common with other means of public transportation it is being regulated by the Interstate

Commerce Commission. There is reason to hope that it may fit into the broad scheme of freight carrying and rate control, as planned by Congress, and lay off evangelism and aggravation. By comparison with any privately owned corporation its accounting system is still as cockeyed as possible, but that charge may be brought against almost every other government-owned business. It can still show paper profits which are denied by its competitors. Just as other government businesses can. But its spirit seems to have changed.

An examination of its history seems in order.

This is especially timely because an effort is being made to create other government-owned barge lines on the Columbia and other western rivers. If an honest examination of the IWC shows that it has been a success, as measured by the standards of business, the argument for such other barge lines is strengthened. If it has been a money-sucking failure in spite of every possible aid from the national Treasury and by discriminatory law, the argument against the extension of government-backed freight boats is stiffened.

IN view of the lamentable condition of the national Treasury, money-draining theory should give way to practical common sense.

Transportation by water is a tradition with Americans. The rivers and bays were the only roads for the first settlers. Fine old houses may still be seen anywhere from Chesapeake bay south which at one time were reachable only by canoe and flatboat. When the railroads came in the bottom was knocked out of water transportation in fact, but the illusion still persisted. Time and money were saved to ninety-nine merchants out of the hundred by using the rails, but the uninformed public continued to think of the rivers as offering money-saving transportation. It does seem, offhand, that it would be less expensive to float a boat along still waters than to haul carloads over steel rails. In fact it is not. Waterways must be improved and maintained—rivers cost as much as artificial canals—and it is extraordinarily expensive to fix a river up with dams and revetments and spillways and the other items that are necessary before 2-way water traffic is possible. Rivers have a way of freezing up and flooding and meandering which lessens their practical value. But there is no denying that the inner vision of a large river placidly bearing laden boats with steersmen singing merrily at their wheels has something attractive about it. These visions are especially luring to Congressmen, who are romantic creatures by nature. Not many of them would ask the business men of their districts to invest a penny in any water transportation scheme, but if the general taxpayer can be induced to put up the money for a boating business in a congressional district, the Congressman resident therein is apt to glow in sheer delight.

IN 1917 we went into the first act of the present World War with that same heart-warming enthusiasm for spending money which we are showing today. In those days we bought something like 2,000,000 pairs of spurs for the heels of 4,000,000 doughboys who would walk in the mud if they ever got to France. Enough horse blankets were purchased to wrap every Army horse

up like a caterpillar in a cocoon. At last accounts there were some thousands of pairs of handcuffs and leg irons left over from that first incandescent vision of an American Army consisting in large part of desperate criminals. There were boats on the rivers and, naturally, the government bought the boats. We are displaying an identical rapture today in getting ready to go to war if we can find a way to get in. The first draft of the first appropriation bill provided for the purchase of 15,000,000 black neckties for the new Army. This would enable each soldier to shift neckties fourteen times before he got all the way around.

The Railroad Administration handled the boating on the lower Mississippi and kindred rivers until 1920. It had, of course, accumulated a considerable fleet of towboats and self-propelled barges and wooden flatboats and whatnots, which it had operated at the inconsiderable loss of $1,000,000 a year, more or less. That loss would hardly take up more than a few minutes of the time of Secretary of the Interior Ickes nowadays, but we were mere tyros in spending then. In 1920, however, the country waked up with a hang over, and Congress wrapped the iced towel of economy around its throbbing head. Almost $14,000,000 had been spilled in the river; the boats were tied up at the wharves; and the upholders of the waterways tradition were shouting that all the losses could be charged to the war and not to the fact that large-scale waterway transportation was out of date. The railroads, they said, would skin the American shipper down to his bones if he were not protected by the competition of the waterways.

THE Secretary of War had been invested with control of the waterways operations. In 1924 Congress became infected with that practicality which is occasionally epidemic in that body and determined to put the waterways on trial. If they could haul freight on terms and under conditions satisfactory to shippers they were to be given a chance to demonstrate the fact. Congress had not then yielded to the socialistic movement of the last few years. It opposed the entrance by government into business which might be carried on by citizens and taxpayers, and ordained that the waterways were to be given five years in which to make good. If during that time it could be shown that the government-owned waterway system could be operated at a profit, it would be put up for sale to the highest bidder. If it could not make this showing the government would get rid of it somehow, and lose another headache. The Inland Waterways Corporation was created.

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This corporation was given the $14,000,000 worth of boats and whatnots and $5,000,000 cash to work with. General T. Q. Ashburn was continued in charge, with the title of president of the corporation. He was a hustler, an enthusiast, with big ideas, and he had been on the river long enough to know what he wanted to do. It is not likely that a better man could have been found. He cleared away obsolete equipment, set up traffic arrangements, made deals with states and cities for wharfage installations, and by the testimony of his critics did everything that could have been done to make a real business of it. Quoting a statement issued in 1940 by Chester C. Thompson, who succeeded Ashburn as president:

> In 1924 the operations extended from New Orleans to St. Louis on the Mississippi river; from New Orleans through the Industrial Canal Lake Pontchartrain, and the Mississippi sound to Mobile, thence up the Warrior River system, consisting of the Mobile, Tombigbee, Warrior, and Black Warrior rivers to Port Birmingham, Ala. Subsequently, the service has been extended on the upper Mississippi river from St. Louis to Minneapolis; on the Illinois Waterway system from St. Louis to Chicago, and on the Missouri river from St. Louis to Kansas City.

THAT is the very heart of the heavy freight territory, and heavy freight is the particular plum for waterways everywhere. But the corporation did not make money, although it had advantages which no privately owned company could have. It paid no taxes; it franked its mail; it had the government rate on its telegraphic business; General Ashburn's salary and the rent of a business office at Washington were charged against the War Department; it paid no interest on the money granted by the government; all personal injury claims were paid by the government, and in various other ways it escaped charges which are taken as a matter of course by privately owned corporations. The period of trial as fixed by Congress ended in 1929, and under the terms of the act the corporation should have been either transferred to a private buyer or wiped out. No one wanted to buy it. In 1928 the persuasive General Ashburn induced Congress to put in another $10,000,000. According to the official statement signed by Thompson, and which puts the best face possible on all the facts:

"On December 31, 1939, the total government investment amounted to $22,352,235."

On this same date, by that same statement, the corporation had:

"An investment of $4,952,123 in cash, securities, and accounts."

Now comes the bookkeeping.

GENERAL Ashburn asserted that from 1924 through 1937 the net income of the corporation was $1,288,899. A privately owned corporation would not consider that a satisfactory return on the investment over a period of thirteen years. But to establish that "net profit" General Ashburn included $1,015,244 interest received on unused money appropriated to the corporation by the government. By no known system of accounting could that be considered operated income. He paid no interest to the government for money and equipment granted. The corporation had been compelled to buy the Warrior River Terminal Company rail line to feed its barges with freight. If the $460,628 earned by the rail line be deducted from the earnings of the barge line proper, a deficit of $186,983

Transportation by Water

"TRANSPORTATION by water is a tradition with Americans. The rivers and bays were the only roads for the first settlers. Fine old houses may still be seen anywhere from Chesapeake bay south which at one time were reachable only by canoe and flatboat. When the railroads came in, the bottom was knocked out of water transportation in fact, but the illusion still persisted."

is discovered. Add to that $100,000 paid by the government for rehabilitating bridges for the rail line, and which any privately owned corporation would be compelled to pay, and the total out-of-pocket sum to the end of 1937 would be $286,983, based on Ashburn's figures. This does not take into account the escaped taxes and interest and other dodgements.

It is not to be wondered at that no privately owned organization ever made a convincing effort to buy the Inland Waterways Corporation. Such a corporation would be compelled to add to its operating costs taxes and interest on the more than $22,000,000 invested by the government, and the postage and telegrams and rents and salaries spoken of previously. But there was no quit in Ashburn. He was as solidly sold on waterway possibilities as he had ever been. He had a "business boat" in which he cruised through the rivers, talking with shippers and politicians. He widened his net of freight agents to scoop in every possible bale and barrel. He seems to have lost sight of the original idea of Congress, that the IWC was to be offered for sale if it could be made self-supporting, and concentrated on the secondary thought that it should be maintained as a rate-reducing competitor of the railroads. In the 1939 report President Thompson repeated the assertion previously made by Ashburn that "the total savings on traffic (in fifteen years) amounted to $32,955,000. That is the difference between charges paid on traffic routed via IWC and what the charges would have been if the traffic had moved all rail."

THAT statement needs examination. For the purpose of the examination it will not be denied. Just looked at. Port-to-port rates on the barges are wholly unregulated. The IWC could cut the rates as low as it pleased and the taxpayer would pick up the check. The IWC has never been a complete system of transportation. Much of its business was fed in by the railroads, and it could not have lived on the low revenue which a large part of its heavy freight—sand and gravel —could afford. For three to five months each year the rivers were unnavigable and the IWC useless. Without the rails its summertime patrons would have merely been marooned. In

this connection it is interesting to note the announcement of the resumption of service for the 1941 season between New Orleans, Peoria, and Chicago. The first boat north bound was scheduled to leave New Orleans on February 12th, while the first south-bound boat was to leave Chicago on March 6th. The difference in dates no doubt reflects the difference in ice conditions on the rivers. To upper Mississippi ports north of St. Louis the first boat was to start from New Orleans on March 9th, while south-bound departures from the twin cities will not begin until April 14th. It is fortunate that shippers and communities served by IWC do not have to depend entirely upon that service.

On business competing with the railroads the IWC cut its rates approximately 20 per cent under the rail cost, in acknowledgment of the fact that the delays and inconvenience of water transportation must be compensated. It did not do a common carrier business, although the claim was made that it did. When steamboats were on the rivers they could and did tie up at every hamlet which signaled freight or passengers waiting. The IWC ignored such river bank and post office stops. Freight and passengers went from them by truck or mule team to the nearest railroad. The freight saving was practically confined to the larger corporations, for the barrel and bale shipper could not use the waterways except to a limited extent. This difference of almost $33,000,000 in fifteen years between all-rail and all-water rates was sheer shenanigan.

"The service," said Senator Bennett Champ Clark at a committee hearing, "has been used for the purpose of ruinous competition."

The late Senator Copeland of New York added: "There is no further excuse for the operation of barge lines on the Mississippi."

RAIL rates are strictly regulated by the government, and the IWC has for fifteen years presented the amazing spectacle of the government telling the rails what they can charge and subsidizing a water-borne competitor which offered a 20 per cent lower rate at the expense of the taxpayer. The IWC's claim of a net income over the fifteen years has already been shown to have been a deficit in fact. One might go on and point out that the improvement of the waterways over which the Federal barge lines operated cost the taxpayers $435,000,000, on which the carrying charge at 4 per cent would be $17,400,000. As the Federal barges carry 45 per cent of the traffic in these rivers its share of this charge would be $7,830,000 annually. The IWC's share of the cost of maintenance and lock and dam operations on the basis of ton-miles would have been $3,084,000. The rails pay 2¾ per cent of the payroll into the Federal Treasury for old-age pensions, and 3 per cent of the payroll for unemployment compensation. The IWC, being a government-owned corporation, is exempted. Personal injury claims against the IWC amounting to about $400,000 have been paid by the U. S. Workmen's Compensation Commission. Chairman Eastman of the ICC in 1939 remarked that the barge lines "are now costing and will continue to cost the taxpayers of this country very substantial amounts annually for interest on the investment and for maintenance, inasmuch as no charge is made against the users of the waterways."

No more space need be given to this fact. The taxpayers went into the business of water transportation with their eyes open. If they did not open their eyes the fault was theirs. Congress gave the money and Congress consists entirely of presumed representatives of the people. But Mr. Eastman went on to comment:

"The traffic will not move by the waterways and the taxpayers' money will have been spent for the purpose, so far as this traffic is concerned (gasoline, petroleum, and crude oil), of giving the Standard Oil and other big companies the benefit of cuts in railroad rates. After it is all over the oil companies will have their reduced rates; the taxpayers will continue to pay interest and maintenance on account of the waterways; and the railroads will have a new hole in their revenues which they must fill up at the expense of some other traffic, if it is not to impair their ability to serve the public."

A coldly factual report made by a committee of the U. S. Chamber of Commerce in 1940, after commenting on the obscure character of the IWC's annual reports, finds that: "Up to the end of 1938 the IWC has fallen short by at least $14,000,000 of making even a moderate financial success of its operations."

In face of these statements, none of which has ever been challenged, Senator McNary of Oregon, not so long ago candidate for the election as Vice President on the Republican national ticket, and Republican leader in the Senate, has introduced Senate Bill 607, "to amend the Inland Waterways Act."

By a new section, (7), to be added to the act of May 29, 1928, the Secretary of War would be authorized to extend the barge line service of the Inland Waterways Corporation to the Columbia river on the same basis as is prescribed under § 3(b) of the act for tributaries of the Mississippi river.

MEANWHILE a change has come over the IWC itself. Under the terms of the Second Reorganization bill the IWC was transferred from the control of the War Department to that of the Secretary of Commerce. Harry Hopkins then held the Commerce brief case, and was not only quite unfamiliar with the operations of the department, but was a very sick man. He turned the IWC operations over to Assistant Secretary J. Monroe Johnson. There were labor troubles brewing at the time, which ultimately came to a head in a strike. In the current report of the IWC this statement was made:

> Growing out of the strike, agreements were entered into for sharing 1938 profits with employees covered by such agreements, and as a matter of policy the same benefits were extended to all other employees of the corporation.

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The IWC puzzle grew more complicated at this point. For purposes of profit sharing, the IWC employees are to be regarded as nongovernment workmen, but if they are injured they become government workers and are paid off by the U. S. Workmen's Compensation Commission. It is also agreed that a profit had been made by the IWC during 1938, although, according to the report of the committee of the U. S. Chamber of Commerce, the IWC in 1938 incurred a cumulative deficit of $2,500,000, if the facts are taken into consideration that it used depreciation rates lower than those a private barge line would employ, and by exemption from expenses which a private enterprise would undergo.

THE IWC had become, in fact, something of a stench in the taxpayers' nostrils, although in the current preoccupation with other governmental affairs and the European troubles not much attention was being paid to it. However, in November, 1939, General Ashburn was relieved of his post and Chester C. Thompson, former member of Congress, was made president. His first report showed a consolidated net deficit for 1939 of $299,949, although income had been credited such items as "revenue from operations other than transportation," amounting to about $200,000. Thompson immedately began to recast the IWC. Some of the older boats were sold; the executive office was removed to St. Louis; and the urgent competition with the railroads for all classes of freight was modified. He evinced a disposition to get rid of the lines of haulage which were least remunerative, and relations with the rails were handled with less crusading fervor.

"The IWC has shown a disposition to coöperate," said an authorized spokesman for the American Association of Railroads.

Optimists need not hang out flags as yet. If Senator McNary is really in earnest about extending IWC operations to western rivers, the IWC will probably be painted up again as the champion of the shipper against the rails.

There are several western rivers and the people who live along their banks may know that to fix a river up so that it can float a barge for several months a year means that anywhere from $150,000 upward will be spent per mile, and that each year thereafter there will be more money spent for caretakers and wharves and groceries and ripraps on each mile. It is, in a sense, like getting money from Santa Claus.

If Santa Claus doesn't care, why should the rest of us? Least of all the taxpayer.

Competition and Bureaucracy

"WE must protect the principles of competition to preserve our system of free enterprise. But we must fight against the power of government being used, under the guise of preserving competition, to force the reorganization of the enterprise system to a pattern in accordance with the beliefs of some individual or group of individuals who have nothing to support their action other than their own convictions."

—ALFRED P. SLOAN, JR.,
Chairman, General Motors Corporation.

St. Lawrence for Defense?

Power for national defense is now put forth as the reason for constructing power projects on the St. Lawrence. The author of this article raises the question whether man power should be withdrawn from defense production to construct costly facilities which will not be completed for years and which might be vulnerable to attack.

By ANDREW BARNES

MARCH 14, 1934. Yeas forty-six, noes forty-two. That date and those figures have rankled in the administration's mind for seven years. It was on that day, and by that vote, that the United States Senate gave the *coup de grâce* to the St. Lawrence waterway treaty with Canada, the first step toward a billion-dollar power and navigation development of the St. Lawrence river. Sixty-four votes were required for ratification of the treaty, and although the administration used every ounce of political pressure and persuasion it could muster, it could not convince a majority of the Senate, even less the two-thirds majority, that the project was feasible.

The years since then have been devoted to constant agitation and the preparation of new arguments for St. Lawrence development. They have been devoted to prosecution of the government power program on every other front.

PUBLIC power advocates have long pictured the private utilities as a great "octopus" reaching its tentacles into every corner of the nation. A glance at the map shows another "octopus," this time the government, itself established in every section except the St. Lawrence. There is TVA in the Southeast; Bonneville and Grand Coulee in the Pacific Northwest; Central Valley in California; Boulder in the Southwest; Denison and Colorado river dams in Texas; Fort Peck in Montana.

There are dozens of smaller public power projects scattered over the map. Only the St. Lawrence region is left as virgin territory for the administration's public power program.

While the administration has been building these other projects, it has devoted much time, also, to searching for precedents—ways and means of short-circuiting the Senate's unwillingness to embark upon the vast St. Lawrence

program until the others have proved their worth and solvency.

THE war provided the administration with its cue. Almost overnight, after the outbreak of war, development of the St. Lawrence—navigation, power, and all appurtenant projects—became important, and finally vital to national defense. The argument was shifted away from the emphasis on "power trusts" to a new term, "shortage of power for national defense."

Soon, according to authoritative reports in Congress, the administration will try again to put the St. Lawrence project over, this time by means intended to circumvent any possibility of Senate disapproval.

IT is expected that within one or two months, after more pressing legislative business is concluded, Congress will be asked to pass a concurrent or joint resolution approving a new agreement now being negotiated with Canada. Here is the trick in this procedure: a concurrent or joint resolution may be passed by only a majority vote of the House and Senate. Administration lawyers and St. Lawrence enthusiasts are convinced that the resolution will do the job as effectively, and as constitutionally, as would the by-no-means-certain two-thirds vote of the Senate to give formal ratification to a treaty.

According to Representative George Dondero of Michigan, a proponent of St. Lawrence development, the State Department believes that the agreement now being brought to a conclusion may be put into effect by a concurrent resolution. He so informed the House only a few days after congressional advocates of the project had conferred with Assistant Secretary of State Adolf A. Berle, who is in charge of the Canadian-American negotiations.

Dondero cited the 1909 treaty with Canada, which provides, in Article 13:

> In all cases where special agreements between the high contracting parties hereto are referred to in the foregoing articles (dealing with rivers, waters, etc.), such agreements are understood and intended to include not only direct agreements between the high contracting parties, but also any mutual arrangement between the United States and the Dominion of Canada *expressed by concurrent or reciprocal legislation on the part of Congress and the Parliament* of the Dominion. (Italics author's.)

THE annexations of Texas and Hawaii by congressional resolution are cited as other precedents, besides the language of the 1909 treaty. This is the legislative avenue that will be taken to prevent another adverse vote in the Senate.

Preparatory to submitting the agreement to Congress, President Roosevelt has ordered the expenditure of $1,000,000 from the War Department's funds for preliminary surveys and studies, and the Department of Commerce has issued the first of a series of reports intended to review, justify—and elicit votes for—the project.

No very clear picture has ever been presented of the precise manner in which the St. Lawrence could contribute to the national defense. Those who have fought for the project state their argument in a categorical affirmative, generalized and devoid of details. It is vital to national defense, they say, and stop there.

THE development would open a lane for the passage of small warships and naval craft to and from the Great

Lakes, but this is of doubtful value. No one envisions military action against Canada, and the United States Navy's plan of defense is not pitched on meeting and defeating the enemy at the shore line or upon the inland waters. It is based upon defeating any enemy thousands of miles from our shores—in the Pacific somewhere along the line from Alaska to the Aleutian Islands, through Hawaii and thence, more recently, to Samoa; in the Atlantic, a thousand or fifteen hundred miles east of our island bases.

St. Lawrence would provide in time additional power for industries of the New England area.

But, here the project falls flat when evaluated in terms of the current emergency. *The New York Times* recently analyzed the St. Lawrence argument and reached this conclusion:

> The more the case for the St. Lawrence power and navigation project is studied as a defense measure, the weaker it becomes.

It would take five years to complete the power development. Until then, St. Lawrence's contribution would be nil. Moreover, the *Times* pointed out, if there is a shortage of power in that area, the Schoellkopf and Adams plants at Niagara, are capable of generating an additional 180,000 horsepower of energy whenever fed a sufficient flow of water. Canadian power facilities are ready, likewise, when given the water, to turn out another 200,000 horsepower. In other words, more power can be had simply by opening the gates a little wider.

Beyond this, the *Times* recalled, Ontario Province is completing the Chat Falls and Carillon power plants on the Ottawa river, to be ready in 1943, and at Beauharnois, Quebec, another dam is virtually ready to begin generating another million horsepower.

Putting it more bluntly, Canadian developments, plus the available additional energy at Niagara, will make available from 1,500,000 to 2,000,000 horsepower of energy before St. Lawrence can ever generate enough voltage to warm a hand flashlight.

Throughout the entire area, on both sides of the international border, private utilities are installing steam plants and expanding their facilities to meet every requirement that the accelerated manufacturing tempo places upon them.

This, then, is the situation as the administration prepares to ask Congress, once more, to underwrite a project of undetermined cost for national defense at least five years hence. The most conservative estimates have placed the cost of St. Lawrence development at $500,000,000, and others have fixed it at

¶ "The *overriding question . . . is whether St. Lawrence should be started at once, or whether the United States should devote its full energies to projects more vital to actual protection against attack; whether a national defense crisis can be used to justify a vast expenditure that can contribute nothing to national defense for at least five years; whether the project should be undertaken when the experts advise that the war may be ended long before that time.*"

more nearly $1,350,000,000. Because such projects, in the end, frequently cost much more than the original estimates, it is impossible to appraise the St. Lawrence with any degree of certitude. This is particularly true in a time of rising costs of materials, labor, engineering services, tools, and equipment. Therefore, any estimate is nothing more than guesswork. The cost of St. Lawrence completed might be nearer two billion than one billion dollars.

THE United States is straining every nerve and muscle of its industrial and financial plant to produce a double supply of weapons of war—one supply for Britain, another for our own defense if Britain should fall in spite of the aid we give her.

The national debt limit has been increased to the staggering total of $65,000,000,000, solely on the justification that the billions will be spent for weapons that contribute directly to defense. The administration is considering plans to subordinate all production to national defense, and they may be placed before the nation before this is published.

There is, admittedly, an acute shortage of tools and equipment. While the supply of steel is for the moment adequate, the administration is disturbed, and there has been much talk of requiring industry to expand its output.

Under these circumstances, the question is raised whether the nation can afford at this time to embark upon a costly project of such nebulous and undetermined value to our defense.

At a minimum cost of $500,000,000 the government would be pouring into this project enough money to buy 2,000 of the best long-range bomber planes. Which would be more valuable for defense?

It would be spending enough to build six or seven of the largest battleships. And again the question comes up: Which would offer the most protection?

It would be spending a sum adequate to provide a year of military training for 400,000 to 500,000 men. Which would be the best guaranty for defense?

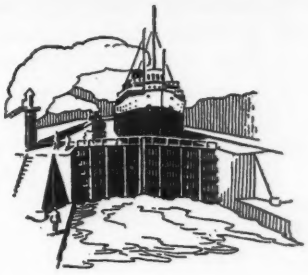
It would be spending almost five times the cost of fortifying the island bases acquired from Great Britain. Could not the money be better used to make every base a virtual Gibraltar?

It would be spending for an indeterminate return five years in advance. The airplanes, the battleships can be built in much less time.

ARRESTING arguments against embarking upon the St. Lawrence project at this period of emergency have been put forward by nationally recognized engineers and economists, such as L. W. Sillcox, an engineer of high reputation; Dr. Lewis Haney, economist; and Walter I. Beam, vice president of the Cleveland, Ohio, Chamber of Commerce. There are others, equally reputable and well known. What are their arguments?

A St. Lawrence program at this time would hamper rather than aid national defense. Millions of tons of steel, needed for ships and weapons, would have to be diverted to construction of dams, power plants, locks, and other facilities.

Not only would this program hamper our own defense, but it would cut down, commensurately, the help



St. Lawrence As Hindrance to National Defense

"A St. Lawrence program at this time would hamper rather than aid national defense. Millions of tons of steel, needed for ships and weapons, would have to be diverted to construction of dams, power plants, locks, and other facilities. Not only would this program hamper our own defense, but it would cut down, commensurately, the help the United States might extend to Great Britain at her most critical period."

the United States might extend to Great Britain at her most critical period.

Thousands of skilled laborers, needed in defense industries, would necessarily be drawn away from those industries and put to work on the St. Lawrence. This would extend from the skilled structural worker and the mechanic right on through the expert engineering and technical services. This would be done at a time when military experts tell the nation that there is not an hour's time to be wasted, that it is "already later than you think," that every ounce of American energy and every bit of American skill must be given unstintingly to production for defense.

Shipping and manufacturing facilities of all types would be diverted, of necessity, to supplying materials and services for the project.

The government, struggling to administer and accelerate a thirty-five billion-dollar rearmament program, would find itself bogged down in the endless details and red tape of creating another vast machinery to plan, superintend, and carry out the St. Lawrence development. At least a half-billion dollars would be siphoned away from the purchase of weapons and munitions.

The resort to steam plants as a source of quick power for national defense production would be discouraged by the inauguration of a project that could supply no power of itself for at least five years.

These are the arguments as they affect the immediate ability of the nation to rearm.

If the project were completed, would it not be as vulnerable as

the Panama canal in time of war? Currently, the government is spending scores of millions of dollars to render the canal less vulnerable to attack, not to mention a $250,000,000 project providing for a second set of locks as stand-by facilities in case the other locks are bombed.

Organized labor groups have questioned the long-time economic effects of the St. Lawrence project. Two of the most serious arguments advanced against the St. Lawrence by organized labor are that it would open the interior of the country to cheap foreign shipping, carrying goods produced abroad under forced labor conditions to undersell American manufacturers in the American market; second, that it would provide an avenue for foreign agricultural products to meet and compete with the American farmer in his own yard.

Curiously, there is minor emphasis on the national defense features of the St. Lawrence as congressional support is being rounded up.

THOSE who support the project are counting heavily on farm Congressmen for their votes. The argument for their votes pictures the St. Lawrence as a project that will open up the nation's bread-basket—the Middle West—to cheap water transportation from the Great Lakes to the Atlantic.

The vision of cheap water transportation to the Atlantic has proved an alluring argument. Railroad freight rates have long been a sore subject, and a political issue in the country.

To the representatives of New England manufacturing sections the project is pictured not only as a source of cheap public power, but as the means of great industrial expansion. Once cheap power becomes available, new industries will move into the area, payrolls will boom, and cities and towns will take on a new prosperity.

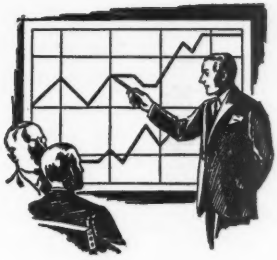
THE overriding question, however, is whether St. Lawrence should be started at once, or whether the United States should devote its full energies to projects more vital to actual protection against attack; whether a national defense crisis can be used to justify a vast expenditure that can contribute nothing to national defense for at least five years; whether the project should be undertaken when the experts advise that the war may be ended long before that time.

If Britain wins before then, our emergency will be safely past. If she loses before then, the cry will not be for more power from St. Lawrence, but for weapons, and more weapons.

Significantly, the Navy Department and the War Department have not emphasized the need for St. Lawrence. Industry has not demanded it. The military experts want the weapons, in the shortest possible time. Industry wants the materials, the tools, and the skilled workers to produce them.

¶ *"IT is a matter of fundamental policy, determined when civilian aircraft priorities were established, that the airlines shall continue to receive delivery of the motors, propellers, instruments, spare parts, and material necessary for maintenance and overhauling operations."*

—WILLIAM S. KNUDSEN,
Director, Office of Production Management.



The Perennial Depreciation Problem

How far have we progressed toward its solution? What are the reasons for the differences of opinion? Can we find a solution? The writer, with thirty-five years of regulatory experience, believes that we can.

By HENRY L. GRAY

Is this depreciation problem of public utility regulation getting us down? Is it really whipping us by the very confusion of theories and babble of tongues which bespeak conflicting opinions? Have we become so softened by interminable controversy that the whole business seems to be taking on the aspect of a Kilkenny cat fight that can never be settled to everyone's satisfaction?

These are becoming fair questions to be asked of the utilities, the commissions, the experts—everyone who has made it his or her business to try to make utility regulation a workable science. In few other kinds of business endeavor can we point to so much literature and argument—so little harmony and accomplishment. After all, public utility rate making is not new. We have been at it a long time—since Lord Hale's ferry boat decision and, in this country, almost since the colonial days.

When I started in valuation work in 1906, our law was Smyth *v.* Ames, decided in 1898,[1] and followed by the Supreme Court with increasingly liberal variation ever since. Prior to that, in the Kansas Pacific Railway Case of 1878, the court had ruled against the inclusion in operating expenses of depreciation charges for amounts not actually expended. But the first formal notice of depreciation as a valuation problem did not come until the Knoxville Water Case in 1909.[2] That was the case wherein Mr. Justice Moody observed that the reproduction cost theory of ascertaining present value "would lead to obviously incorrect results if . . . not diminished by the

[1] 169 US 466, 42 L ed 819.
[2] 212 US 1, 9, 53 L ed 371.

depreciation which has come from age and use."

These and other so-called landmark cases are old stuff to readers of this publication. Furthermore, they have been so often chewed over and "interpreted" by legalistic soothsayers from the left, right, and center that they have become considerably vague and shadowy. Smyth *v.* Ames itself is still shrouded in the clouds of doubt wrapped about it by the special concurring opinion of Mr. Justice Brandeis in the Southwestern Bell Telephone Case of 1923.[3] The Brandeis opinion in turn marred a masterful presentation of a case in favor of investment instead of present value as a rate measurement by the persistent use of that argumentative phrase, "prudent investment."

"Prudent investment" became an attractive cliché, then a vogue, next a sort of regulatory cult; and finally it developed the inevitable schism because of disagreement over what constituted "prudent." Right now, if we strip away excess verbiage and fancy statistics, it begins to look as if we are not much nearer a satisfactory treatment of depreciation than we were in the early years of the century.

IN 1906, we were beginners. There were no literary lamps of experience to guide our feet. Everything printed was eagerly read, and many of us blossomed forth as authors. When texts and reports finally appeared, they disclosed startling differences of opinion. They still do. By hunting around, it is possible to find some court or commission decision to sustain almost any point of view.

The beginners today have plenty to read. There are a number of instructive texts, containing digests of court and commission decisions, with comments, tables, and curves, and generally presenting arguments in favor of some regulatory feature advocated by the writer. In addition to the texts, the reader is likely to seek original sources, and to look into various documents issued by state and Federal agencies.

Our Federal agencies (the ICC, the FPC, and the FCC) have been especially active in telling the utilities how to keep books and reports. The National Association of Railroad and Utilities Commissioners has, from time to time, published committee reports ostensibly designed to bring about standard practice—the practice usually depending upon the viewpoint of the particular author. One NARUC publication in particular, which has been given considerable circulation (although it is my understanding that it was never adopted by the NARUC nor agreed upon by the association's full depreciation committee), is the so-called "Colbert Report." Asel R. Colbert, head of the accounts and finance department of the Wisconsin Public Service Commission, who is well known and respected for his ability and sincerity in regulatory circles, was chairman of the 1938 Special Committee on Depreciation and, presumably, had a lot to do with the drafting of this interesting document which was printed, reprinted, sold, and circulated by a private publisher under the imprimatur of the NARUC.

HOWEVER, it must not be assumed that the "Colbert Report" sums up NARUC depreciation rules as they are. It would be fairer to say that it

[3] 262 US 276, PUR1923C 193.

sums up NARUC rules as Mr. Colbert and others would like to have them. In truth, while the NARUC depreciation rules have been broadened so that a utility may use almost any depreciation accounting method it desires, the retirement reserve method still is in general use.

Indeed, Mr. Colbert, in presenting the 1938 report to the NARUC convention, said it was intended "to provoke discussion on depreciation, to promote thought on the subject, and perhaps eventually to get more action." For these purposes, at any rate, the report was a great success. A spirited discussion was started immediately and is still going. Since, therefore, this does not seem to be an exclusive or private fight, but one in which anyone is free to join, I'd like to get into it, even if a bit late. Here goes:

Now there appears to be a certain ritual to be performed by anyone presuming to discuss depreciation. Bernard S. Rodey, Jr., New York city utility executive, outlined it succinctly in an article published in PUBLIC UTILITIES FORTNIGHTLY, Vol. XXVI, August 29, 1940, when he said in effect: First you must say depreciation is a "tough subject." Next you must call attention to the confusion of definition and conflicting interpretations of the meaning of the word by courts, commissions, and other authorities. (Here it might be well to run over a few excerpts from leading and somewhat dog-eared cases, like a prima donna running up and down her scales.)

THEN comes another warming up exercise which is something like shadow boxing. The author must call attention to the numerous accounting methods and discuss them pro and con. Finally, after the reader has perhaps become bewildered as to what the author personally stands for, the latter should launch into a discussion of the application of one or all of these methods to rate cases, incidentally revealing his personal preference, if any.

I am not one to fly in the face of this orthodox tradition; but in the interest of brevity, let us cover these preliminaries briefly and assume that justice has been done to them. As to the difficulty of depreciation, I shall quote a passage so old that it has taken on a patina of authority. It is from the 1917 report of the Valuation Committee of the American Society of Civil Engineers:

> Perhaps no single subject connected with valuation has caused more trouble than depreciation. This has been due to various causes, not the least of which has been confusion in the use of the term. Depreciation is sometimes used to mean decretion, which is a loss of service life; sometimes to mean the money allowance made in the bookkeeping to offset accruing loss of service life; and sometimes the loss of value existing at any time due to the loss of service life or any other cause.

Under the heading of definitions, we

¶ "ENGINEERS *are concerned principally with valuations and rate making, both of which are far from being exact sciences. They are obliged to deal with situations as they exist, and to follow the courts. They know that the cost of property is an element of value—but that according to the courts, it is not 'the' value.*"

could save a lot of time and come right to the point with the following excerpt from the Supreme Court opinion in Lindheimer *v.* Illinois Bell Teleph. Co.[4]:

> Broadly speaking, depreciation is the loss, not restored by current maintenance, which is due to all the factors causing the ultimate retirement of the property. These factors embrace wear and tear, decay, inadequacy, and obsolescence. Annual depreciation is the loss which takes place in a year.

This is an engineer's definition, or, in substance, a loss of useful life. Note that the court refrained from using the word "value." The court went further, and said:

> In determining reasonable rates for supplying public service, it is proper to include in the operating expenses, that is, in the cost of producing the service, an allowance for consumption of capital in order to maintain the integrity of the investment in the service rendered.

THESE definitions are so close to those used by the various Federal agencies (ICC, FPC, SEC) and the NARUC, that there is no need for further quotation. But I would like to compare them with some definitions which came out of a little book entitled "Principles of Depreciation," published away back in 1915 by Dr. Earl A. Saliers, former accounting instructor at Yale. His definition of accrued depreciation agreed substantially with the Lindheimer Case. Then, Dr. Saliers defined annual depreciation as the "slow process by which industrial plant, whatever its present effectiveness may be, gradually approaches the time of discard and replacement." Note the similarity of this definition to the "departure of useful life" commonly used by engineers.

Dr. Saliers also called attention to the difference between "unit depreciation" and "composite" or group depreciation. In the former the limits are 100 and 0, while with the latter the limits are 100 and something like 70 or 80—for the reason that a plant containing a large number of units probably never will depreciate, as a whole, more than 20 or 30 per cent.

I think that much of the difficulty in agreeing on a definition of depreciation comes from the differences in the professional viewpoints of accountants and engineers. For example, the Colbert Report defines depreciation as a "loss in service value." That is the accountant's viewpoint. Engineers are inclined to regard depreciation as being a "loss of useful life or serviceability." The NARUC Special Committee on Depreciation for 1939 spoke of "loss of service capacity," which seems to have been a compromise between the engineers and accountants forming the committee. I am not sure just what that was intended to mean.

ENGINEERS are concerned principally with valuations and rate making, both of which are far from being exact sciences. They are obliged to deal with situations as they exist, and to follow the courts. They know that the cost of property is an element of value —but that, according to the courts, it is not "the" value. They realize the impossibility of accurately predicting periods of service; and it is difficult for most of them to see how an efficient unit, which may have lost some of its possible total service life, has lost value so far as rates are concerned.

Accountants are concerned principally with keeping track of the money

[4] (1934) 292 US 151, 3 PUR(NS)337, 347.

Definition of Depreciation Reserve

"A DEPRECIATION *reserve is a* BOOK ACCOUNT *created for the sole purpose of recording the various transactions relating to depreciation expense, such as (1) the annual credits to the reserve; (2) balancing the annual charges to operation; and (3) balancing charges against the reserve for retirements and replacements. It is not intended to be an exact measure of the accrued depreciation in the plant, and could not be so, except as a coincidence."*

invested, earned, and spent in operations. They are precise. To them, "investment" and "value" are the same thing. To them, "service life" is the same thing as "service value"; and they conclude that as life departs, so value departs, for all purposes.

The 1938 report of the NARUC bears strong evidence of editing by an accountant — presumably our friend Mr. Colbert. To an accountant, value means money; and loss means loss of money. Naturally, the accountant favors accounting methods, and is unsympathetic with other methods. He can see no connection between the operating efficiency of a unit, or the observed depreciation thereon, and its value for rate-making purposes. With him, tests and observations do not count for much. He believes that depreciation is a loss in property value, which should be deducted from the actual cost in order to arrive at a rate base.[5]

Now with reference to the 1938 NARUC report, I think it is a fair criticism to suggest that it per-

[5] Incidentally, the 1938 NARUC report seems to take quite kindly to elaboration. Witness the following quotation from C. Beverly Benson, statistician of the New York Public Service Commission: "The Method of Least Squares can be used for the smoothing process, but because the observations come at equal intervals one of the modern iterative methods is suggested. One of the best of these is the elegant modification of the orthogonal polynominals of Tchebycheff by R. A. Fisher in his Statistical Methods for Research Workers (Oliver & Boyd, Edinburgh, 1932), pp. 133-142. This method has the advantage of several automatic checks; and the polynominal values for the fitted portion, as well as for the extrapolated portion, can be computed by successive addition without the necessity of actually forming the equation of the curve." All of which seems to me as though Mr. Benson were getting ready to make a scientific guess at something.

sistently uses the words "value" and "loss" where they do not fit, or are not needed. For example, "salvage value," instead of "salvage"; and "retirements losses" instead of "retirements." To me, it seems that the report almost strives to label something as a "loss," so that it can be deducted from something else labeled as "value."

Well, what do I think about the situation?

As stated before, I have been in the business for a long time—have handled literally hundreds of valuation rate cases for all sides. Naturally, I have definite conclusions. They could not possibly be new. They are shared by some, disputed by others. But here is my code of fundamentals on the subject of depreciation for what it is worth:

ANNUAL depreciation charges are included with other operating costs in order: (1) That the true net revenues may be known; (2) that compensatory rates may be calculated; (3) that the dissipation of invested capital through the payment of unwarranted dividends may be avoided.

A depreciation reserve is a *book account* created for the sole purpose of recording the various transactions relating to depreciation expense; such as (1) the annual credits to the reserve; (2) balancing the annual charges to operation; and (3) balancing charges against the reserve for retirements and replacements. It is not intended to be an exact measure of the accrued depreciation in the plant, and could not be so, except as a coincidence. The reserve should not be confused with a cash fund; but the annual credits to the reserve, if earned, are real money.

THAT portion of this real money which is not used for current replacements generally is best used for plant additions and extensions; particularly as many mortgages limit the issuance of bonds for extension purposes to something like 75 per cent of their cost. When replacements are necessary, they will be made from such funds as are in the treasury. The reserve does not necessarily indicate the amount of plant investment made from funds other than those borrowed or subscribed. In the last ten years, many earned dividends have been passed, and used for construction purposes.

There is no reason why the amount of the reserve should coincide with the so-called accrued depreciation in the plant. There is no reason why, in the middle of the assumed life of a unit, exactly one-half of its cost should be represented in a reserve. Where the depreciation rate is made a function of some rate of interest, the accrued depreciation will be purely theoretical, and may or may not approximate actual depreciation. There is no simple method of setting up a reserve which will meet the law of probability of failures. It is safe to say that with the use of any of the various methods of depreciation accounting now in vogue, the depreciation reserve and the actual plant depreciation never can be equal. So why try to accomplish an impossible and useless thing?

There is no advantage in creating a large reserve which serves no useful purpose; but it must be presumed that the management is the best judge of just what is a "useful purpose," as it is informed concerning prospective large retirements.

A single unit has a limited life; but a

complete public utility plant, as an institution, has an unlimited life—it continues to expand and serve. The physical plant is kept in good condition by maintenance and replacements. The obligation to make replacements rests upon the utility and is quite independent of reserves. Regardless of the size of the depreciation reserve, the utility must make the necessary replacements, or quit business.

ANNUAL depreciation charges, which are of the nature of insurance to provide for future replacements, sometimes are called "replacement annuities." They are not annuities at all. An annuity is something that is paid back from an accumulation. Depreciation charges go to create such an accumulation. In order that each year's operation shall bear its part of the cost of eventually replacing the several plant units, service lives must be assumed, and annual depreciation charges must be calculated, and included in operating costs. Actually, an accumulation for depreciation is intended to replace the capital invested in plant. The cost of replacing the plant units may be something different from that.

There are a number of theories as to how to determine probable useful lives, and how to calculate depreciation charges. Different authorities favor different methods; but all agree that in estimating probable periods of service, operating experience is required. As there is such a large factor of uncertainty, it is both unnecessary and futile to speculate as to the exact form of the curve along which depreciation accrues.

As a practical matter, what a utility can accumulate to offset depreciation will depend upon how much income there is left after deducting everything else. The most elaborate determination of the rate of depreciation, and the most careful selection of an accounting method, will accomplish nothing if the utility fails to earn. Depreciation cost is quite real, regardless of the method used to estimate it, and whether or not it be earned.

MANY accountants on state and Federal payrolls seem to favor elaborate bookkeeping methods for depreciation accounting. If a utility is willing to spend the time and money, this is perhaps harmless enough exercise. However, while such results may be interesting, they are hardly worth while. A simple composite rate determined from experience will serve the purpose fully as well as a rate picked off a "smoothed" curve the coördinates of which were determined by some elaborate probability calculation, such as the "Least Squares" method. In plainer language, all of us know that many utilities—probably most of them —do not calculate their annual depreciation costs. Instead, they make such

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¶ "ACCOUNTANTS *are concerned principally with keeping track of the money invested, earned, and spent in operations. They are precise. To them, 'investment' and 'value' are the same thing. To them, 'service life' is the same thing as 'service value'; and they conclude that as life departs, so value departs, for all purposes.*"

an annual charge for depreciation as they have found, through long experience, will be sufficient to make the necessary replacements and take care of the pending retirements. There is no justification for regulatory bodies to force unnecessary bookkeeping upon the utilities.

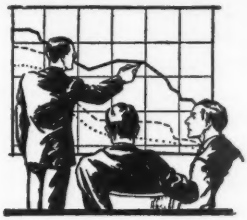
What becomes of the money which the ratepayers put up each year with which to make future replacements? That part of it which is not used for replacements generally will be used for extensions and improvements. Having used the money, unquestionably the utility should pay something for it, in the way of interest credits to the reserve. If the money was in a fund, probably the most satisfactory way to take care of it would be to use it to buy up the utility's outstanding bonds. The interest earnings therefore would depend upon the desirability of such bonds. If the utility was able to build up such a fund, the bonds would rate high; and the interest earnings, even if continuous, would not exceed the bond interest rate. Due to frequent replacements, however, the continuity of earning capacity would be disturbed, resulting in a still lower interest earnings.

Now we have the criticism that it is inequitable to invest the money resulting from the annual depreciation charges in new plant, while the plant as a whole is permitted to earn a fair rate of return. It is urged that the interest credits to the reserve should correspond to the rate of return.

What about that? Well, first of all, that would be a pretty high price to pay for money. The chances are that, standing alone, some years might elapse before the extensions could earn a fair rate of return. Extensions are made to supply a public need. To the customers, adequate facilities are more important than low rates. The utility furnishes these needed facilities, knowing that they will not immediately earn a fair return. The utility can borrow money with which to make improvements at a lower rate than the rate of return. If the utility uses the reserve money for new construction purposes, it would seem that the annual interest credits to the reserve should not exceed the interest which would be paid for money borrowed from outside sources. Isn't that fair enough?

There is another angle to this. Extensions increase the volume of business; and even though they may not earn a full rate of return, the increased number of units sold will make rate reductions possible. Electric rates steadily tread downward. In normal times, each reduction will bring additional business, and other reductions will follow. Improved appliances are responsible for a considerable part of the increase in business; but without rate reductions, such appliances might be beyond the reach of the average consumer. The customers attached to the extensions use appliances. There is no doubt but that extensions figure prominently in rate reductions; and the ratepayers benefit from extensions.

On the other hand, rate reductions by the utility too often are regarded as admissions of guilt. The regulated utility gets no particular benefit from rate reductions, except where the sliding-scale method of rate fixing is used, as in Washington, D. C. There, the reserve receives no interest



Consideration of Accrued Depreciation

"WHERE the depreciation rate is made a function of some rate of interest, the accrued depreciation will be purely theoretical, and may or may not approximate actual depreciation. There is no simple method of setting up a reserve which will meet the law of probability of failures. It is safe to say that with the use of any of the various methods of depreciation accounting now in vogue, the depreciation reserve and the actual plant depreciation never can be equal. So why try to accomplish an impossible and useless thing?"

credits; the rate of depreciation decreasing as the reserve increases. In the case of any utility with a favorable record of rate reductions, it is possible that the ratepayers may have *already received* something like interest credits. Just how that might be taken into account, and just what effect it might have on future interest credits, I shall not attempt to say; but the idea is entitled to consideration. The mechanics of its application might be complicated; but, in general, the idea is the same as that underlying the sliding-scale method of fixing rates.

How should accrued depreciation be determined in rate cases? Too bad we have to determine it at all, as it really has no bearing on what is a fair rate for the service rendered; however, we seem obliged to go through that useless motion. For all short-life units, such as ties, poles, and the like, which are not subject to functional depreciation, and where there is sufficient history, the old mortality table method is as good as any, provided that experience is called in.

To be specific, I have seen cedar poles which had been in use for forty years —or more than twice the life ordinarily expected. When it comes to things which do not decay, such as machines, there just isn't any way of telling how long they will be in service. I know of one hydroelectric plant built in 1898, in which the first water wheels were thrown out on the dump after less than two years' service. The wheels which replaced them are still in service, and still going strong after forty years' service, and may run another forty years.

IT is difficult, if not impossible, to determine to what extent equipment items have depreciated. Efficiency tests give some indication, and intelligent

observation by those experienced in plant operation is important; but, actually, no one knows. That does not mean that no provision can be made for the eventual replacement of equipment units. Arbitrary service lives can be assigned, and annual charges computed on that basis. Thus, there may be a considerable difference between the determinable depreciation in a plant, and that indicated by the assumed service lives; but such difference should not be so great as to seem ridiculous. All computations should make sense.

What about the rate base? There is no reason, apart from court law, why this should be exchange value. The natural rate base, one which should be most satisfactory, is the actual investment made in property, or the original cost new. True, it should be scanned, both for inclusions and omissions. Many legitimate items of plant cost never get into the plant account. Overheads frequently are understated. What is sought is *the real cost of creating and putting the particular plant into successful operation.* With the actual cost as a rate base, no elaborate system of complicated equations and graphs would be required to determine the annual depreciation charge. Whatever its amount, it would be credited to the reserve; and whatever the amount of the reserve, it would be in plant, and earn interest. Almost any reasonable annual depreciation rate would be satisfactory, and the amount of accrued depreciation would be quite immaterial, as it would have no bearing upon the rate base.

Fair charges for service are independent of elapsed time, as represented by the ages of operating units. In rendering service, the thing required of plant units is utility, which cannot be measured in money. Actually an older plant may render better service; *i. e.,* have greater utility than new.

Fair charges for service are made up of the cost to produce the service (including depreciation charges) and a reasonable amount for a return. The "value of the service" is just as nebulous as the value of the property. Comparisons are interesting and sometimes instructive; but they cannot measure the fairness of rates.

We use too many words, and frequently use them improperly. Why use "value" at all? When it gets to the courts, it becomes "exchange value," which may be something different from a fair rate base. We have abandoned much of Smyth *v.* Ames—why not abandon all of it, and use the actual investment as the rate base, as urged by Mr. Justice Brandeis. Too bad the other Justices failed to agree with him—for I think that was one instance in which he was right. The actual investment, properly determined and undepreciated, would make an ideal rate base.

Our valuation troubles would be over. Our accounting troubles would be over. Last, but not least, our depreciation troubles would be over.

¶ "THE *telephone is a public instrument constantly used by criminals, and to say that it cannot be policed is to offer an open invitation to criminals to use it freely for their purposes.*"

—DOROTHY THOMPSON,
Writer.

Wire and Wireless Communication

A RECORD-breaking increase of 950,000 telephones raised the total in service in the Bell system at the end of 1940 to 17,484,000 while the average number of telephone conversations last year was 79,303,000 or 5,500,000 more a day than in 1939.

This $5,484,988,929 communication system had gross operating income in 1940 of $1,174,322,000, which was 6 per cent more than in 1939. Because taxes increased $28,693,000 to $187,598,000 or about $11 a telephone, net operating income was only 1.6 per cent above 1939 figures.

Net for the system, after deducting interest on debt, applicable to American Telephone and Telegraph Company, increased $20,216,000 to $210,497,000. AT&T earnings were equal to $10.08 a share, against $9.24 year before, while net for the system applicable to AT&T was $11.26 a share, compared with $10.18 the year before.

The huge utility reported 147,500 male employees at year-end, of which 57,000 registered for the draft and more than 500 entered military life. Stockholders decreased 5,900 to 630,000, which included one-fifth of the employees of the Bell system.

A net increase of $157,164,000 in telephone plant, the investment rose to $4,747,674,000. Recounting effects of the defense program on activities of the great telephone corporate domain, Walter S. Gifford, president, said construction had been accelerated and "prudent" measures taken to safeguard telephone facilities. "Reserve power equipment was installed or ordered at all important telephone central offices which did not already have it to assure continuity of power supply under all conditions," he explained.

STEPS were taken, he added, to increase the available transmission circuits on important routes and work was rushed for completion by the end of 1941 on westward extension from Omaha to Denver of twin underground cables, buried 30 inches with the aid of a special plow perfected last year. Mr. Gifford stated that it was planned to extend these cables beyond Denver to connect with the far western cable network at Sacramento, California, making the first all-cable transcontinental telephone line. The buried cables, he pointed out, will protect service from interruption by snow and ice.

Apparently with an eye on war-time threats to supplies of imported materials, Bell research men experimented with synthetic materials, including use of cellulose acetate in place of silk for wire insulation and synthetic rubber wire covering to "give better appearance and durability."

* * * *

ON March 6th President Roosevelt appointed Ray C. Wakefield to the vacancy on the Federal Communications Commission left by the resignation of the late Commissioner Thad Brown. While there was a chance that senatorial critics of the FCC might use the con-

firmation proceedings of any appointment to that commission as an opportunity to present their demand for an investigation, no substantial opposition was expected to be made to the Wakefield appointment. Instead, it was felt that by selecting a well-qualified and generally respected state utility commissioner, who is also an active member of the Republican party in his native state, President Roosevelt had astutely cut much of the ground from under enemies of the FCC in the Senate who might have been able to rally another attack had a less popular appointment been made.

Commissioner Wakefield is a native of Fresno, California, educated at Stanford University (A. B., '16; J. D., '18) and was admitted to the California bar in 1918. Following a period of law practice in the city of Fresno, during which he filled several local public offices, Commissioner Wakefield was appointed to the California Railroad Commission in the fall of 1936—a post which he held at the time of his appointment to the FCC.

Commissioner Wakefield was also active in the affairs of the National Association of Railroad and Utilities Commissioners, of which he is the first vice president. Under ordinary circumstances, Commissioner Wakefield would be automatically elected president of the NARUC at its annual convention next fall. However, it may be that his appointment to the Federal commission may alter this schedule. So far there has never been an active member of a Federal regulatory commission holding elective office in the National Association of Railroad and Utilities Commissioners.

The new commissioner is forty-five years old, married, and has two children.

* * * *

PROPOSED new Federal Communications Commission rules for the commercialization of television would prevent any monopolistic control of the new form of radio entertainment. While specifically prohibiting any person or corporation from controlling more than one station in a service area, unless showing it would foster competition, one of the proposed rules lays down an affirmative policy that the commission will consider the ownership, operation, or control of more than three television broadcast stations to constitute the concentration of control in a manner inconsistent with the public interest.

The drafts recently made public, which also include proposed engineering rules, have not received the approval of the commission, except for the purpose of providing a basis for discussion at a public hearing, scheduled to begin in Washington on March 20th. The proposed rules resembled those in existence more than a year ago, when the commission suddenly suspended a previously issued commercialization order because of its expressed fear that a receiver sales campaign in New York city by the Radio Corporation of America might freeze television standards to the system of transmission developed by that corporation.

To obtain a license, an applicant must show he has adequate sources of program material to render satisfactory television broadcasts and that he will be able to compete with any other station in his area.

* * * *

GEOGRAPHICAL separation of Great Lakes coastal harbor stations with a view to achieving coördinated shipshore radiotelephone communication operations in the public interest is the basis of Federal Communications Commission "Proposed Findings of Fact and Conclusions," on 15 pending applications, including renewals, for such facilities. Traffic and population densities were additional considerations.

In the case of the Lorain County Radio Corporation, the commission proposed to grant authority for coastal harbor station WMI at Lorain, Ohio, to use the frequencies of 4,282.5, 6,470, and 8,585 kilocycles, but to deny the request to use 11,370 kilocycles, since the latter is not available for such use; and to authorize that corporation's stations WAD and WAS, at Port Washington, Wiscon-

sin, and Duluth, Minnesota, respectively, to also use 4,282.5 kilocycles.

In the matter of applications by Thorne Donnelley, doing business as Donnelley Radiotelephone Co., the commission proposes to authorize station WAY at Lake Bluff, Illinois, and station WHC, Mackinac Island-Rogers City, Michigan, to use 4,282.5, 6,470, and 8,585 kilocycles, but to deny them the use of 6,480 and 8,550 kilocycles; to authorize construction of a new station at Houghton, Michigan, to use 2,182, 2,514, 2,550, 2,582, 2,738, 4,282.5, 6,470, and 8,585 kilocycles, but to deny it the use of 2,572 kilocycles; and to deny authority for new stations at Marine City and Manistee, Michigan.

The commission proposes to authorize the Michigan Bell Telephone Company to construct new stations at Detroit and Port Huron, Michigan, to use 2,182, 2,514, 2,550, and 2,582 kilocycles.

With reference to Radiomarine Corporation of America applications, the commission proposes to authorize construction of a new station at Buffalo, New York, to operate on 2,182, 2,514, 2,550, 2,582, 2,738, 4,282.5, 6,470, and 8,585 kilocycles, but to deny authorization for a new station at West Dover, Ohio.

INCREASED requests for radiotelephone facilities on the Great Lakes, coupled with a commission study of the situation then in progress, caused the commission, on March 27, 1939, to designate pending and subsequent applications for such service.

Hearings were held at Cleveland, from March 4 to 8, 1940, on the general subject of allocating higher frequencies for use on the Great Lakes. As a result, certain frequencies above 3,000 kilocycles were made available for assignment to Great Lakes coastal harbor stations on a supplemental basis. Also, the rules were changed with respect to the manner of using low frequencies in this service.

Hearings on the individual applications were held in Washington from May 13 to May 29, 1940.

WIRE tapping became quite a noticeable issue in Congress, notwithstanding the more sensational closing hour of Senate debate on the lend-lease bill. On the Senate side, a special committee under Senator Tom Stewart of Tennessee investigated alleged wire-tapping abuses by business men. According to somewhat sensational advance information published in certain newspapers, the Senate wire-tapping committee was preparing to delve into subpoenaed records of the National Association of Manufacturers to determine whether business interests have engaged in systematic wire tapping in order to discredit public men and organizations. Somewhat similarly sensational insinuations made by this committee some weeks ago with respect to wire tapping by utility interests and with respect to intercepting telephone messages on lines used by Justices of the Supreme Court of the United States failed to live up to advance notice.

On the House side, the Judiciary Committee was engaged in considering two bills to authorize wire tapping by Federal investigation agencies and to use evidence so obtained as legal evidence. Such practice is now forbidden by law under Supreme Court decisions. However, agitation to legalize Federal wire tapping has been growing because of the need for defensive measures against attempted sabotage on the national defense program and for counterespionage purposes generally.

President Roosevelt, however, declared himself as opposed to one of the bills before the House Judiciary Committee — introduced by Representative Hobbs of Alabama. This bill would authorize the use of wire tapping by the head of any executive department of the Federal government for purposes of ascertaining or preventing violations of laws which such executive departments are required to administer. President Roosevelt felt that the Hobbs bill went too far, but agreed that a bill to authorize Federal wire tapping might be very desirable if it were confined to matters of national defense and for police work in connection with Federal

crimes, such as kidnapping or extortion.

A second bill before the House Judiciary Committee, introduced by Representative Walters, Democrat of Pennsylvania, would confine Federal wire tapping more or less to checking up on national defense work. It is believed that this measure, or a substitute bill similarly restrictive, might be enacted at the current session.

The controversy over antiwire-tapping legislation also came to the front in New York recently, when the state senate codes committee reported favorably the Coudert bill governing the issuance of *ex parte* orders by judges on applications by police or prosecuting officers for permission to tap wires. A companion bill, prohibiting the use of wire tapping except with such an order, was still in committee at this writing. Despite the senate committee action, the fate of the legislation appeared dark.

* * * *

ECONOMIC and competitive implications involved in extension of lines by the Western Union Telegraph Company and Postal Telegraph-Cable Company were scheduled to be inquired into by the Federal Communications Commission, which accordingly ordered a covering public hearing at its offices in Washington on March 4th.

It appeared from information in the possession of the commission that, in connection with extension of lines under § 214 of the Communications Act, these companies "have or may have resorted in certain instances to wasteful competitive policies and practices in providing unwarranted duplication of services and facilities to individual customers or to the public, resulting in improvident expenditures, unreasonable rates to the public generally, unlawful discrimination, preference, prejudice, advantage or disadvantage, and have or may have operated such extended lines and rendered service over or by means thereof to individuals or to the general public without first having complied with the tariff filing requirements of the act and the terms and conditions contained in certificates of public convenience and necessity issued by the commission."

* * * *

AN estimated saving of $400,000 a year to telephone users in "interstate Pacific" territory was indicated by new tariffs for message toll telephone service filed with the FCC by the Pacific Telephone & Telegraph Company and its subsidiaries. The changes, effective March 15th, were in compliance with a commission order of February 3rd.

Message toll service between points in four states—California, Nevada, Oregon, and Washington—as well as northern Idaho, was affected. Under the new rates, a station-to-station telephone call may be made from San Diego to Seattle, or vice versa, at a cost of $2.40, as compared with $3.50 under the old rates. Comparable reductions were made in rates for toll service between other points.

* * * *

TWO telephone line additions representing a proposed expenditure of more than a million dollars were authorized by the FCC early in March.

The American Telephone and Telegraph Company and the Southern Bell Telephone & Telegraph Company plan to supplement existing facilities between West Palm Beach and Miami, Florida, at an estimated cost of $901,800.

The American Telephone and Telegraph Company and the Chesapeake & Potomac Telephone Company intend to augment facilities between Baltimore and Annapolis, Maryland, at a cost of $228,600.

* * * *

IN an opinion handed down on February 28th by Judge Keller, the Pennsylvania Superior Court sustained an order of the state public utility commission refusing to require installation of telephone service which it found would be used in furtherance of the publishing and distribution of "scratch sheets" for use in race-track gambling. *Plotnick v. Pennsylvania Public Utility Commission et al.*

Financial News and Comment

By OWEN ELY

Consolidated Gas of Baltimore

Consolidated Gas, Electric Light & Power Company (incorporated 1906 as a merger of two companies) supplies gas, electricity, and steam heating to Baltimore and adjacent Maryland territory. It also has a joint contract with several other companies to service part of the Pennsylvania Railroad's electrified mileage, and furnishes some power to Potomac Electric Power of Washington under a long-term interchange agreement. Consolidated also has a contract, good to the end of 1947, to supply electricity to the Sparrows Point plant of Bethlehem Steel, a connection of special interest under present conditions.

Jointly with Pennsylvania Water & Power, Consolidated controls Safe Harbor Water Power Corporation. About 60 per cent of its electric output (the percentage varies considerably) is obtained, under long-term contract, from these companies' hydroelectric plants on the Susquehanna river; the balance from its own steam plants, capacity of which is being increased. About three-quarters of the company's revenues are from electricity (30 per cent domestic, 32 per cent commercial, and 36 per cent industrial and wholesale), with the balance principally from gas.

Capitalization is conservative, funded debt constituting about 47 per cent, preferred stock 19 per cent, and common stock (with surplus) 34 per cent. Owing to its high credit rating, the company has been very successful with its refunding operations, the principal bond issues bearing coupon rates of 2¾, 3, 3½, and 4½ per cent (the last noncallable). An issue of $12,000,000 2¾s was brought out early in 1941, replacing a smaller issue of 3½s and providing some new capital. In 1940 fixed charges took only 6.6 cents out of the revenue dollar compared with 10 cents in 1929. The two preferred stock issues have low dividend rates, 4½ and 4 per cent.

The company's tax burden is not so heavy as that of some others, possibly owing to absence of heavy local drafts on revenues such as affect Consolidated Edison and Commonwealth Edison. In 1939 the ratio of taxes to gross was 14.6 per cent, and for the twelve months ended November 30, 1940, 15.4 per cent.

While the depreciation rate (about 9.8 per cent in 1940) looks low compared with other leading companies, this is undoubtedly due to the fact that two-thirds of the revenues are obtained by sale of power bought from other companies. That the rate is ample is indicated by the growth in the retirement reserve from 5.9 per cent of plant account in 1929 to 13 per cent in November, 1940.

The company's rate structure is reasonably low: The 1939 average revenue per kilowatt hour was 4.0 cents for residential service, 3.1 cents for commercial, and .95 cents for industrial. Rates were reduced in 1929, 1933, 1936, 1937, and 1939. In 1940 the net return on property value (less depreciation, plus working capital) amounted to about 5½ per cent, which seems well in line with current regulatory trends. The common stock record since 1929 has been as follows:

Year	*Earned*	*Paid*	*Range*
1940	$4.41	$3.60	83⅛–65½
1939	4.94	3.60	84½–71

1938	4.06	3.60	74 –55
1937	4.84	3.60	89⅛–60
1936	4.57	3.60	94⅛–84
1935	4.41	3.60	90 –52⅝
1934	4.04	3.60	68 –48½
1933	3.91	3.60	70½–43¼
1932	4.29	3.60	69¾–37¼
1931	5.21	3.60	101 –57⅜
1930	5.42	3.60	136¼–78
1929	6.26	3.00	160 –70

As of November 30, 1940, cash assets exceeded current liabilities and the current ratio was about 2.7 to 1.

It is difficult to analyze the decline in share earnings for 1940 (from $4.94 to $4.41) because the preliminary income account does not report taxes and depreciation (these items being included with the operating expense total). In the statement for the twelve months ended November 30th, gross revenues showed a gain of about $2,437,000; while expenses increased $1,547,000, depreciation $418,000, and taxes $679,000—a total increase of $2,644,000.

The year-end statement, however, shows a gain in revenues of $2,611,000 *versus* a jump in expenses, etc., of $3,061,000, apparently indicating some adjustment in taxes or depreciation.

With electric output about 16 per cent over last year, the company seems to be enjoying its share of national defense business, and increased gross revenues should provide enough additional net in 1941 to offset higher Federal taxes.

The stock is currently selling on the Curb around 65 (1941 range 73-64⅛) to yield about 5.55 per cent. Because of the stability of the earnings, the high credit standing, and absence of adverse local factors, the stock has remained a favorite with conservative investors, despite the fact that it is not listed on the Big Board.

Utility Tax Burden Recognized

Two recent developments indicate that the extraordinary tax burden borne by the utilities has not been entirely overlooked by regulatory authorities.

The New York Public Service Commission, in its annual statement to the governor and the legislature, presented a special report on taxes, salient points of which were the following: (1) During the past decade rates have been cut, but taxes have more than doubled. (2) Taxes have curbed further rate reductions, while certain utility companies have reached the point where they cannot pass tax increases on to their customers even when they might be legally entitled to do so. (3) Utility rate comparisons involving areas where tax burdens differ are neither fair nor valid.

The disparity between the growth of revenues and taxes in New York city has been particularly marked, the report pointed out. During the period 1924-39 revenues gained about 34 per cent, while in the same period taxes increased 189 per cent. (See also p. 429.)

The commission referred critically to unqualified comparisons of electric rates in different cities (such as figures released by the FPC and other Federal agencies, as well as the New York Power Authority). Such comparisons, it was emphasized, were unfair unless the difference in the tax burden was taken into account.

THE SEC is also concerned about utility taxes, according to recent press reports, but its interest in the question seems motivated by a desire to facilitate the sale of common stocks in connection with integration proceedings and also to improve the capital structure of the operating companies.

SEC members are said to have proposed that the Treasury Department recommend to Congress either that (1) taxes be computed on the balance *before* interest, instead of on net income as has always been the case, or (2) that some provision be made to give equal treatment to a percentage of capital which goes into corporate structures.

The commission's tax proposals should be carefully studied before being given legislative sanction. If present normal income tax rates were applied to the balance before interest instead of to net income, Federal taxes imposed on the industry would be increased about 60 per

cent. (In 1939 the interest charges of the private electric light industry were about $300,000,000 compared with about $500,000,000 net income.) The burden on the railroads would be increased even more sharply, while many industrial companies with no funded debt would be unaffected.

Probably it is not the intention of the SEC to increase the tax burden of the utilities, for if more taxes are paid earnings will be reduced and this would defeat the object of stimulating equity financing. It makes no difference at what point in the income account taxes are computed—it is the total amount of taxes which affects share earnings. If bond financing is to be penalized by reducing earnings available for interest, stock financing will be penalized to even greater degree, and the present trend toward bond financing would thus be accentuated.

If, however, the proposal is to impose the same tax as before, but merely to shift the location of the tax item in the income statement, this is a matter of accounting procedure and should be referred to the FPC and the state commissions, rather than to the Treasury Department. As a practical matter both the utilities and the railroads usually deduct Federal income taxes (along with other taxes) before arriving at a balance available for fixed charges; and the coverage (number of "times earned") is thus figured *after* deducting taxes. The SEC proposal, if correctly reported, seems to be somewhat puzzling. If the net result is to increase taxes, that result should not be disguised as an attempt to favor equity financing when it will have exactly the contrary effect. And if it is merely a change in accounting nomenclature, it is difficult to see what effective result it can have. Obviously, more light on the proposal is needed.

SEC Reports Flotation Costs For 1938-39

THE SEC has issued a 104-page report on the "Cost of Flotation for Registered Securities 1938-1939." In the latter year costs accounted for 2.6 per cent of the funds realized from the sale of underwritten bonds, 6.3 per cent for underwritten preferred stock, and 16.9 per cent for underwritten common. (On stock offerings which were not underwritten the cost was 16 per cent for preferred and 19 per cent for common stock.) The figures showed little change as compared with those for 1938.

The cost for bond offerings was about evenly divided between expenses and the compensation to bankers handling the issue; the cost for smaller bond issues was about twice as great as for the largest ones.

There was little difference in the cost of handling utility bond issues compared with those of other industries, but preferred stocks were offered more cheaply by the utilities—possibly because most of these issues are offered to holders of old issues before the unexchanged balance is publicly offered.

SEC Favors Insurance Company Purchase of Utility Equities

COMMISSIONER Pike recently caused a momentary flurry in utility stocks by advocating their purchase by insurance companies. This proposal apparently grew out of the SEC's desire (1) to improve the market for liquidation of large blocks of utility stocks by holding companies under the program envisaged under § 11; (2) the fact that insurance company income has been declining, owing to low interest rates; and (3) the commission's dislike of the insurance companies' practice of absorbing large utility bond issues by the "private offering" method.

Mr. Pike's ideas were presented in connection with the TNEC insurance inquiry. His proposal, welcome as it might be to some of the holding companies, is not immediately practicable. Most of the larger United States life insurance companies are barred from buying stocks by long-standing state regulations, although fire insurance companies are allowed

some latitude in this respect. In Canada, restrictions were formerly less severe and Sun Life became one of the largest holders of common stocks, but Canada has now tightened up these provisions and permits only 15 per cent of total assets to be thus invested.

Based on a canvass of the industry, *The Wall Street Journal* reports that the life companies are not anxious to increase their income by buying common stocks. Vice President E. E. Rhodes of the Mutual Benefit Life Insurance Company, speaking as a member of a committee of insurance executives, stated that the life companies should be considered as trustees, and that a policy of buying stocks during the twenties would have resulted in disasters. President Thomas I. Parkinson of the Equitable Life Assurance Society pointed out that life insurance companies had paid out $29,000,000,000 to policyholders and beneficiaries since 1929, despite the worst period of depression this country has experienced.

Commissioner Pike's recommendations to Congress were based upon a study requested of the SEC by the TNEC, but this survey was prepared by two special officials and had not been voted upon by the commission itself. It apparently ignored a statement filed earlier by 178 insurance companies with TNEC.

In connection with the insurance investigation, it is reported that the SEC will seek new legislation requiring private security offerings to be registered under the Securities Act, on the grounds that insurance policyholders are entitled to complete information about the securities purchased by their companies and also because some of the offerings absorbed by the insurance companies might, in later years, be distributed to the public—thus raising a question under existing law as to possible obligation to register the secondary distribution.

Public Service of Indiana

AN amended plan for Public Service of Indiana has been filed with the SEC. The company is to be merged with four other Indiana operating subsidiaries of Midland United Company (Insull holding company long in receivership, in which Middle West Corporation has a substantial stock interest). Capitalization of the new company will be as follows:

Bonds	$56,039,000
Serial notes and debentures	9,907,948
5% preferred ($100 par)	14,825,600
Common ($25 par)	27,719,600
Total	$108,492,148

The original plan had provided for 600,000 shares of preferred with a par value of $50, and 2,000,000 shares of $25 par common stock, making total capitalization of $111,064,917.

Following is the distribution of securities under the new plan (to public holders of the old stocks):

	New Preferred	*New Common*	*Cash*
Public Serv. of Ind. $7 Prior Pfd.	1	1	$29.54
Pub. Serv. of Ind. $6 Prior Pfd.	1	1	21.75
Pub. Serv. of Ind. $6 Pfd.	..	6	..
Terre Haute Elec.	1.2	..	1.50
Central Indiana Power Pfd.	1	2	11.25

Midland United's trustee now owns or controls all of the common stocks of the four companies and also some of the preferred stocks dealt with in the plan. It is proposed that the trustee buy 80,000 shares of new common at the par value of $25, bringing his total holdings to 490,974 shares. Technically, control of the new company would rest with public holders of the preferred stocks of the various operating companies who would receive a total of about 46 per cent of the new common.

A preliminary report indicates that about $1.88 per share was earned on the new common stock in the year 1940. At the present price of the $6 preferred of Public Service of Indiana, the new common stock would be worth $9 a share. Since the $7 prior preferred stock is currently around 115½, deduction of the cash and one share of common would indicate an estimated value of $77 for the new $5

preferred. Since dividend requirements on the new preferred were earned nearly four times last year (on an "overall" basis, 1.66 times), such a valuation appears conservative compared with other issues—assuming, of course, that the plan is consummated without further difficulties.

February Security Issues Largely Placed Privately

DESPITE the decline in the stock market and irregularity in the bond market during February, the dollar amount of utility security offerings, about $185,000,000, exceeded any month since the previous February. The principal issues were as follows:

Georgia Power 1st 3½s due 1971 @ 103¾ (sold privately to insurance companies)	$101,271,000
Wisconsin Public Service 1st 3½s due 1971 @ 106 (syndicate headed by First Boston Corp.)	26,500,000
Wisconsin Public Service 5% pfd. stock @ 105 (unexchanged shares offered by First Boston syn.)	13,200,000
Philadelphia Suburban Water 1st 3½s due 1971 (placed privately with institutional investors)	15,900,000
Commonwealth Water 1st 3½s due 1965 (sold privately to insurance companies)	5,010,000
Lake Superior District Power 5% pfd. stock @ 102½ (unexchanged shares offered by Wisconsin Co. syn.)	3,500,000
Virginia Elec. & Power ref. 3½s due 1971 @ 106½ (sold privately to insurance companies)	3,000,000

Of the sixteen bond issues sold by utilities during the month all but two were privately offered, and only about 16 per cent of the dollar amount represented public offerings. While it is obvious that the utilities turn to private financing at times when general market conditions are unfavorable, this trend may be somewhat checked if the SEC obtains an amendment to the Securities Act of 1933 requiring registration of such offerings.

During the first week of March only one important bond offering appeared, the $16,000,000 Public Service of Oklahoma first 3¼s of 1971 at 103½, offered by a Glore, Forgan-Bonbright syndicate; $8,450,000 5 per cent preferred stock (first offered to stockholders) was underwritten by the same syndicate.

Offerings expected in the near future are the $110,000,000 Pacific Gas and Electric first 3s of 1968, $15,000,000 Ohio Power first mortgage bonds due 1971 and $20,240,300 preferred stock, and $2,645,000 Kansas Electric Power 5 per cent preferred stock, these issues having been registered with the SEC. Buffalo Niagara Corporation has applied for permission to sell $9,000,000 2¼ per cent debentures to insurance companies. In connection with a hearing called on the latter issue, the SEC has called attention to the fact that existing funded debt of the corporation amounts to 54.4 per cent of net property and that the total of funded debt, intercompany debt, and the new debentures would equal 62 per cent of net property.

Now that Commonwealth & Southern has successfully completed refunding operations for Georgia Power, plans are reported under way to refund $95,878,000 Alabama Power 4¼s and 5s. It is generally assumed that this might be handled through private placement in a similar manner to the Georgia Power program, possibly accompanied by balance sheet equity readjustments.

Illinois-Iowa Power Company has been considering a refunding program for some time, but has not yet worked out a satisfactory plan. The company's funded debt amounts to about $97,000,000.

EEI to File As Service Organization

THE Edison Electric Institute, statistical and fact-finding organization for the electric power and light industry, decided recently to register with the Securities and Exchange Commission as a service organization in compliance

with the provisions of the Public Utility Holding Company Act. The decision was reached at a meeting of the trustees, and it was announced that the necessary filings with the SEC would be made immediately.

Since the institute is considered a trade association, operating on a purely nonprofit basis, there was some discussion among the trustees as to whether registration was required. Counsel engaged by the institute, however, advised registration under § 13 of the Holding Company Act. The next utility association to be faced with the problem of registration is the American Gas Association.

SEC Asks Competitive Bids

DESCRIBING "disorderly competition" in two recent refunding operations, the public utilities division of the Securities and Exchange Commission asserted recently that competitive bidding was "the only possible means of avoiding competition of this character." This view was expressed in a detailed report of an investigation of the issuance of bonds last fall by the San Antonio Public Service Company and the Columbus & Southern Ohio Electric Company, both subsidiaries in the United Light & Power Company system.

The history of the two transactions, the division said, "bears sharply" upon the competitive bidding problem now being considered by the commission. The division recommended recently that the SEC require competitive bids in the sale of public utility issues of more than $1,000,000. The commission sat for five days at public hearings on the proposal and was reported to be considering a revised form of the recommendation.

The utilities division declared that the outcome of the San Antonio deal "could not be regarded as entirely satisfactory from the point of view of any of the parties to the transaction."

The report showed that the Mellon Securities Corporation, Pittsburgh, had arranged a syndicate to handle a $16,500,000 bond issue by San Antonio Public Service with a public offering price of 107 and a net to the company of 105, but that at the last minute Otis & Co., Cleveland investment house, submitted a bid of 107 net.

Thereupon the Mellon group changed its plans so that the bonds were sold to the public at 107½, with a net to the company of 107. For practical purposes the syndicate did not function, since the bonds were sold mostly on a "directed basis" to 69 institutional investors.

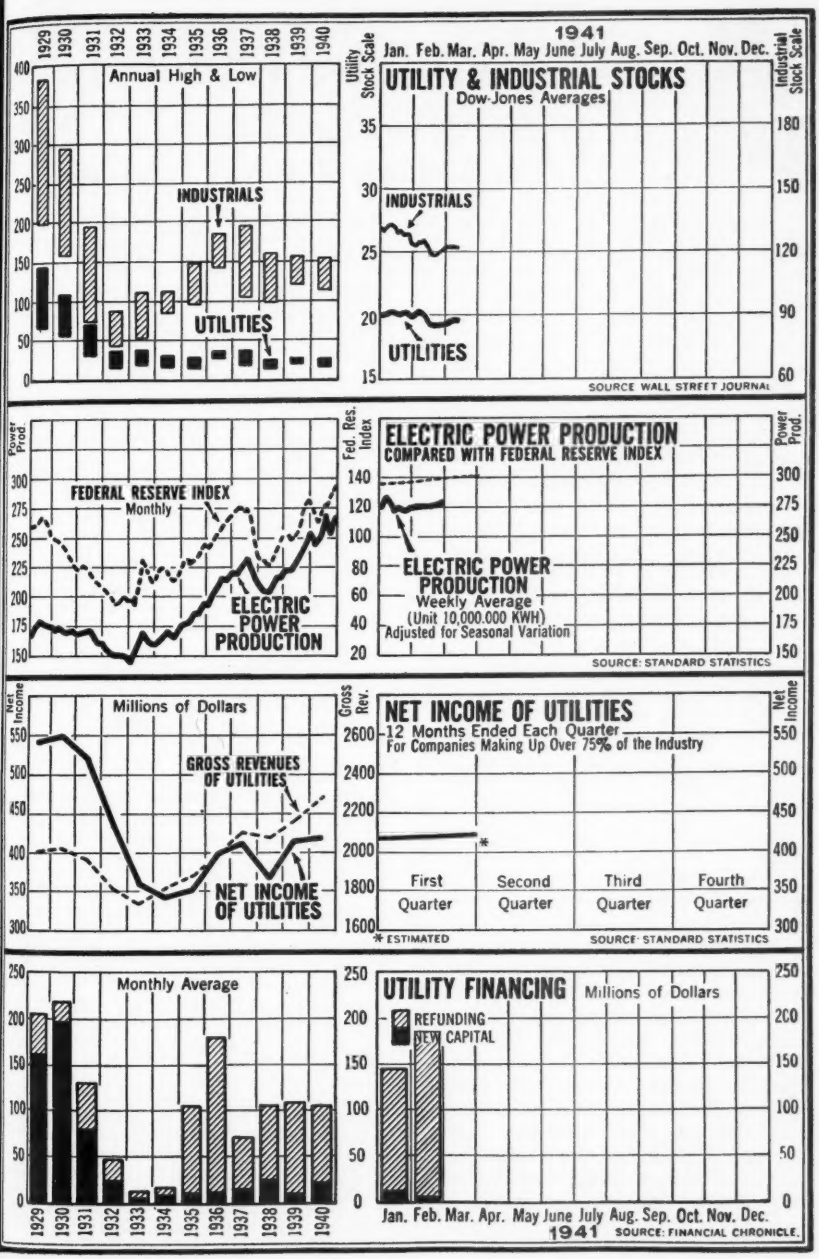
Dillon, Read & Co., New York, managed the Columbus & Southern Ohio transaction. This related principally to an increase of Otis & Co.'s participation from $1,300,000 to $2,300,000. The Cleveland house mentioned competitive bidding early in the transaction, but it was not discussed further and the bonds were sold to the public at 107, with a net to the company of 105.

"It is hard to escape the conclusion," the division said, "that if there had been competition in the Columbus transaction the issuing company would have received a higher price for its bonds."

Columbia Gas Plans Financing

THE Columbia Gas & Electric Corporation took steps early this month to refund its outstanding funded debt by filing with the Securities and Exchange Commission an application for approval of the issuance of $120,000,000 of new debt. This action marked the first time in several years that holding company has sought to undertake a major debt-refunding operation. Under the provisions of the Holding Company Act, holding company financing is subject to the closest scrutiny of the SEC, and, in its most recent findings, the commission has held that such debt should be eliminated rather than perpetuated.

In announcing the filing of its application, the Columbia Corporation indicated that $28,000,000 of the newly proposed securities would be in the form of serial debentures maturing from 1942 to 1951; and $92,000,000 would be sinking-fund debentures maturing in 1961.


Annual High & Low
1929 1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940
INDUSTRIALS
UTILITIES
1941
Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.
Utility Stock Scale
Industrial Stock Scale
UTILITY & INDUSTRIAL STOCKS
Dow-Jones Averages
INDUSTRIALS
UTILITIES
SOURCE WALL STREET JOURNAL
Power Prod.
FEDERAL RESERVE INDEX
Monthly
ELECTRIC POWER PRODUCTION
Fed. Res. Index
ELECTRIC POWER PRODUCTION
COMPARED WITH FEDERAL RESERVE INDEX
ELECTRIC POWER PRODUCTION
Weekly Average
(Unit 10,000,000 KWH)
Adjusted for Seasonal Variation
SOURCE: STANDARD STATISTICS
Net Income
Millions of Dollars
GROSS REVENUES OF UTILITIES
NET INCOME OF UTILITIES
Gross Rev.
NET INCOME OF UTILITIES
12 Months Ended Each Quarter
For Companies Making Up Over 75% of the Industry
First Quarter
Second Quarter
Third Quarter
Fourth Quarter
* ESTIMATED
SOURCE: STANDARD STATISTICS
Monthly Average
UTILITY FINANCING
Millions of Dollars
REFUNDING
NEW CAPITAL
Jan. Feb. Mar. Apr. May June July Aug. Sep. Oct. Nov. Dec.
1941
SOURCE: FINANCIAL CHRONICLE

What Others Think

Public Spending After The Defense Boom

SOME day World War II will have run its course. Win, lose, or draw, it is inconceivable that the present pace of spending, not only for our own national defense, but for that of virtually every embattled democracy in the world, can go on indefinitely. Furthermore, the drained resources of the totalitarian powers will require a sharp curbing in military expenditures once the fateful issue of world domination is decided.

When that day comes, the question of what steps will then have to be taken to return our American economy to its normal peace-time operation will depend in great part on the verdict of Mars. Assuming that the United States government will not then be so exhausted and hampered by adverse military developments as to be unable to finance the transition from war back to peace as a public project, plans are already being laid which may eventually have an important bearing on the future of public utility companies in America.

Secretary of Interior Ickes has already suggested that a huge backlog of public works projects might be used as a transitional device to provide jobs for those dismissed from defense industries and the active military services. Furthermore, when Secretary Ickes talks about public works it is only natural to assume, on the basis of past performance, that he has in mind public projects of a public utility nature—notably electric plants.

HOWEVER, the very cessation of activities in the armament industries, shipyards, aircraft factories, and so forth, is likely to throw a heavy block of power capacity into the ranks of unemployed. The same may be said to a lesser extent of the gas and telephone industries.

An alternative suggestion for a "billion-dollar cushion" of public spending following the collapse of the war industries boom was discussed editorially in *Agricultural Engineering* for February, 1941. It stated in part:

> One suggestion has come to us from within the agricultural engineering field and relating to it. A program of rehabilitating farm buildings could be developed as a billion-dollar-a-year cushion during the period of readjustment of business to peace-time production. Briefly, here are the considerations, as represented to us.
>
> Farm houses and other buildings are known to fall far short of desirable standards to meet living and production needs. New construction, remodeling, and routine maintenance have been postponed during the past two decades of quite general agricultural depression.
>
> Specifically, it is estimated that 250,000 new farm houses per year, 700,000 other new farm buildings, and repairs and improvements to a still larger number of existing buildings will be needed each year for the next ten years to overcome the present shortage and provide for normal replacement.
>
> One billion dollars per year is a low estimate for the investment value of this amount of building, even with allowance for reduction of cash outlay through use of local materials and home labor.
>
> It is also well within farm ability to finance, without subsidy. It means an average of about $150 per year for each farm in the United States, or of about $250 per year for each of the 60 per cent of our farms which are free of mortgage indebtedness. This is considerably less per capital than urban investment in housing and construction for business operations. It represents about three times the present level of farm building operations.
>
> This amount of farm building activity can be brought about by furnishing competent, free architectural and engineering advice to farmers who want to make building improvements, and need only help to get started. It is known that farmers generally have a latent or potential desire to improve their buildings, which becomes effective when they are shown what it can do for them, that

it is within their means, and how to get most value for the money they might invest. The program contemplated would provide schools and demonstrations, as well as individual service, to clarify these points for farmers. It would have the sound farming, business, and engineering objective of encouraging this use of available man power, money, and materials only whenever and however their use in improving farm buildings could be clearly justified by the estimated contribution of such improvements to the material and living values to be realized by the farm family.

If such a program were undertaken, it would follow that privately owned and operated public utility industries might be provided with fresh fields for enterprise instead of having their existing properties shot from under them by public subsidy of competitive publicly owned and operated utility services. Closer coöperation between the Rural Electrification Administration and the private power industry could make an advance in rural electrification a normal accompaniment of such a farm rehabilitation program.

As *Agricultural Engineering* points out, the period following the war boom will be one of grave danger to our American institutions and it would be wise to plan a course of action more likely to encourage our traditional system of free enterprise than further ventures into the field of state socialism which might eventually place our feet on the road to Moscow or some other totalitarian economic solution. Describing the difficulties which will confront us on the day when the defense boom grinds to a halt, the *Agricultural Engineering* editorial stated:

> ... The bottom will drop out of our war-supply export trade. Other export trade opportunities may be limited. Our own national defense "catch-up" program will get caught up, and, if not actually decreased, will level off at some maintenance demand for men and materials which will be less than its present expansion demand. That part of our man power and production which measures the difference between profit and loss, between prosperity and depression, between labor shortage and unemployment, will need to be redirected into other activities. We will have to return to thinking in terms of peace-time prosperity, a balanced national budget, and reduction of the national debt.
>
> The greatest danger to our prized democracy and its institutions at that time will be our own internal economy. It will be another national emergency! It will be an emergency of providing or creating extensive opportunity for every man to apply his brain and brawn to national resources in a way of his own choice, to produce efficiently, directly or in exchange value, individually or collectively, and to the limit of his effective desire, things that he needs and wants. The only other alternative is a reversion within our country toward the age-old, uncivilized, anarchistic struggle and insecurity of getting and having, not by production and economic service, but by taking from others by trickery, connivance, and brute force.

The editorial went on to state that it would have been better if we had anticipated and started preparing for our present defense emergency five or ten years ago—when eventual international conflict on a large scale was freely predicted by most world observers. Instead of that we spent public money during the depression on palliative projects which in many cases were simply invented to make jobs. In fairness it must be admitted that some of these projects have stood us in good stead during the defense emergency. But with respect to a great many of them we could certainly have wished that they had been directed towards more practical, if not directly defensive, purposes.

It was the economic collapse that followed the peace of 1918 which led to European revolution and the establishment of dictatorship on such a wide scale. Troubles came to the victor and to the vanquished alike. Germany was bled white and in desperation brought forth national socialism under Hitler. Other countries felt the drain of the long struggle to defend their democracies from the onslaughts of Communism and its incipient leftward movements. It was largely because European democracies were thus weakened that they could not meet in a more timely and decisive fashion the challenge of dictatorship from the right.

There is in all this a lesson for us, but whether we shall profit by it will depend on the plans now being made in Washington for solving the critical economic problem which will inevitably follow the end of World War II.

Courtesy, The New Yorker

"NEVER MIND, MEN. I GOT THEM ON THE TELEPHONE"

Chamber Committee Reports on National Power Reserves

LITTLE more than a year ago the Natural Resources Department Committee of the Chamber of Commerce of the United States published a report entitled "Power Capacity to Meet National Needs." In this report it was maintained that existing and new generating capacity of utility companies could produce between 140,000,000,000 and 145,000,000,000 kilowatt hours in 1940 without difficulty.

In a more recent report (January, 1941) this committee finds that its prediction became an accomplished fact and that because of new capacity there was a safety factor of spare power reserves equal to 30 per cent of the year's peak. Industrial activity in 1940, stimulated by foreign war and home defense, made substantial new demands. Throughout the country the committee found that utilities were able to meet almost any de-

mand with surprising promptness and efficiency. During the year 1,900,000 kilowatts of new capacity were added and it is expected that 3,420,000 kilowatts will be added in 1941—exceeding by 1,000,000 kilowatts the greatest previous record in the industry's history. That was in 1930 when 2,490,000 kilowatts were added.

The sale of power to industry in 1940 was up 16½ per cent over 1939; retail commercial sales were up 7 per cent; and residential sales were up 10 per cent. The over-all increase was 11 per cent above 1939, the total generation being nearly 141,000,000,000 kilowatt hours. Looking to the years ahead in the light of the swiftly expanding defense program, the committee report stated:

> It is generally agreed that 1941 and 1942 will be critical years in the national defense program. The need for additional power, however, would seem to be abundantly met by the industry's expansion program. The following table shows assured new capacity for 1941 and 1942, with early indications of 1943 additions:

NEW ELECTRIC POWER CAPACITY
(Private and Government)

	1941 (Kw.)	*1942 (Kw.)*	*1943 (Kw.)*
In Nonindustrial Areas, Private Systems ...	1,774,200	1,573,500	132,000
In Nonindustrial Areas, Private Systems ..	249,300	471,000	65,000
Municipal Plants ...	369,834	174,350	46,500
Federal Government .	811,600	476,000	216,000
Other Governmental..	215,000	.....	.....
Total	3,419,934	2,694,850	459,500

> If there is added to these 1941-42 totals scattered installations in isolated steam plants that have been reported, of nearly 400,000 kilowatts, a grand total of around 6,500,000 kilowatts is indicated as an all-around 2-year expansion figure. This is a 15 per cent increase to present capacity and it is but a little short of the 6,772,000 kilowatts added during the three highest expansion years; namely, 1928, '29, and '30. The construction budget of the industry for 1941, which excludes all Federal expenditures, is placed at $730,000,000, equaling the average expenditure during the expansion period of the twenties.

THE committee feels that this new construction program is adequate for any possible defense emergency. However, it observes that there are additional sources of power available through the staggering of work hours to avoid unnecessary peaks and valleys in the industrial load and the possible use of reserve capacity. Improvements in interconnection and dependability of fuel supply, it was pointed out, tend to reduce the spare capacity needed for reserve purposes. It conceded that the billions of dollars being spent annually in the defense program have not yet reached high-gear production, but the committee report was confident that whatever new power demand might develop, the industry's new capacity already programed, "plus the flexibility in our private electric utility system, seem ample to meet it."

ELECTRIC POWER SUPPLY. Report of Natural Resources Department Committee, Chamber of Commerce of the United States. Washington, D. C. January, 1941.

TVA Rushes Power for Defense

AN account of the emergency construction program now being rushed by the TVA to increase its available firm power by 300,000 kilowatts in a period of three months is presented in the February 27th issue of *Engineering News-Record*. The power is needed primarily for the aluminum industry and will come from three major sources: An hydro development on an upper river tributary, a steam plant to "firm" the hydro power against high and low waters, and the installation of additional generating units at existing dams. The cost is estimated at more than $65,000,000, of which $25,000,000 has been already authorized for the fiscal year 1941.

Wilson dam, which TVA inherited, had a capacity of only 184,000 kilowatts, less than a quarter of which was "firm" power during periods of low flow. The TVA also inherited the Sheffield steam plant with 60,000 kilowatts capacity. Since it was created in 1933, the TVA

PRESENT AND PROPOSED WATER-CONTROL PROJECTS OF THE TENNESSEE VALLEY AUTHORITY

		Dam			Reservoir		
		Power					
Project	River	Authorized Installation, kw.	Ultimate Capacity, kw.	Date of Completion	Volume below Top of Gates, Acre-ft.	Controlled Storage, Acre-ft.	Total Project Cost
Kentucky .....UC	Tennessee	128,000	160,000	8/ /45	6,100,000	4,570,000	$105,000,000
Pickwick Landing C	Tennessee	108,000	216,000	12/31/38	1,091,000	418,000	35,761,000
Wilson CI	Tennessee	234,400	444,000	4/ 1/26	535,000	.....	36,192,000
Wheeler C	Tennessee	129,600	259,200	7/31/37	1,150,000	429,000	35,770,000
Guntersville C	Tennessee	72,900	97,200	7/ 1/40	1,019,000	282,000	31,605,000
Hales Bar .....A	Tennessee	50,483	50,483	11/ 2/13	125,000	.....	7,000,000
Chickamauga .....UC	Tennessee	81,000	108,000	1/ /41	705,000	377,000	34,792,000
Watts Bar .....UC	Tennessee	90,000	150,000	12/ /41	1,132,000	370,000	35,000,000
Fort Loudoun .....UC	Tennessee	64,000	96,000	6/ /44	365,000	105,000	29,000,000
Norris C	Clinch	100.800	100,800	7/31/37	2,567,000	2,020,000	30,937,000
Hiwassee .....UC	Hiwassee	57,600	115,200	2/ /41	438,000	365,000	17,385,000
Ocoee No. 1 .....A	Ocoee	18,000	18 000	.....	76,600	25,800	X
Ocoee No. 2 .....A	Ocoee	18,800	28,200	.....	0	0	X
Blue Ridge .....A	Toccoa	20,000	20,000	.....	197,500	183,000	X
Great Falls .....A	Caney Fork	29,370	29,370	.....	54,500	49,400	X
Cherokee .....UC	Holston	90,000	120,000	1/ /43	1,640,000	1,200,000	34,500,000

C—Constructed by TVA.
CI—Constructed prior to TVA.
UC—Under construction by TVA—Data subject to revision.
A—Acquired by purchase from utilities.
X—No definite figures available.

has completed six dams and is building four more. The six dams now have a capacity of 447,800 kilowatts, making a total of 691,800 kilowatts installed by government agencies.

The purchase of the Commonwealth & Southern properties and other units in Tennessee increased this total until now TVA has 984,800 kilowatts capacity in the Tennessee valley. The National Defense Advisory Commission wanted more power, so the TVA made studies of all hydro sites and many locations have been investigated for foundation conditions so that information on all potential power development sites has been made available and TVA confidently expects to increase its firm power by 300,000 kilowatts by the end of 1942. *Engineering News-Record* stated:

> Location of the principal structure of the emergency program, to be known as Cherokee dam, is on the Holston river above Knoxville, where its storage can be utilized for power at all of the main river dams of the TVA system. The added water available thus justifies addition of two more generating units at Wilson dam and one at Pickwick Landing dam as well as three units at Cherokee, a total of 214,000 kilowatts.
>
> To insure constant power when flood or low water reduce the efficiency of the hydro development, a steam plant is now under rush construction just downstream from the Watts Bar dam. Construction of the dam was started in 1939, concrete for the lock and much of the spillway has been placed, with substantial completion expected late in 1941 and units in commercial operation by May, 1942.

THE article goes on to outline the engineering features of the Cherokee dam on the Holston river and gives the above comprehensive table on present and proposed water control projects of the TVA.

¶ "THE *United States has not found it necessary to interfere in any way with regular broadcast programs. Nor can I conceive an emergency so grave that it would require taking the vast burden of broadcast operations out of the hands of the broadcasting industry.*"

—JAMES LAWRENCE FLY,
Chairman, Federal Communications Commission.

A Saga of the Power Industry

IN 1876, the United States celebrated its one hundredth anniversary as an independent nation. The celebration was marked by the holding of the centennial exposition at Philadelphia. It might be fair to say that the year 1876 also marked the birth of the Electric Age, although it is probable that nobody at the time realized it.

On exhibition in Machinery Hall were two small, crudely fashioned electric dynamos, one the product of the Belgian inventor, Gramme, and one by an American, Wallace. Each supplied current to a single arc lamp and one of them drove a small pump. Spectators paused for a moment to examine these curiosities and then passed on to lavish their admiration upon the huge Corliss steam engine—a gigantic machine which overshadowed everything else in Machinery Hall. The Corliss engine was 30 feet high, the world's greatest prime mover, capable of producing 1,000 horsepower of mechanical energy.

Little did the admiring throng know that the day would come, within a few decades, when the little electric dynamos in their forgotten corner would just about steal the show from the panting steam monster.

Yes, the year 1876 stands for much in the history of important conquest and exploitation of the mystic force of electric power. It was in that year when Edison first discovered the principle of incandescent lighting through a fragile carbonated filament of thread. It was during that year that Charles Francis Brush in Cleveland was busy fashioning another electric dynamo to create illumination through the agency of arc lamps. Elihu Thomson and James John Wood were already dreaming of dynamos of their own, each with distinctive design.

NONE of these four men, Edison, Brush, Thomson, and Wood, had the faintest idea in 1876 that their respective activities would be of value to the others. Each had his own theories, his own workshop, his own financial supporters. Yet, each was destined to see his work furnishing an indispensable contribution to an infant industry—that is responsible for civilization as we know it.

A readable chronicle of this saga of electric power is contained in the posthumous work of John Winthrop Hammond, recently published by J. B. Lippincott Company, under the copyright of the General Electric Company. Mr. Hammond spent more than three years collecting material for this volume. After he died in 1934, his 300,000-word manuscript was edited and condensed by the well-known industrial writer, Arthur Pound, who also added a brief epilogue, bringing the subject up to date.

The work thus spans the growth of electric power from the sputtering arc light to the modern marvels recently and dramatically exhibited at the New York World's Fair 1939-40. Although the work is, as the subtitle discloses, "the story of General Electric," it is by no means restricted to a discussion of the corporate history of that organization. Coffin, Stanley, Steinmetz, Sprague, and many other pioneers, in addition to the four already mentioned, are all given just recognition for their important work in placing electric power at the service of mankind.

The book is written in a popular style, with interesting illustrations, which make it as entertaining as it is educational. Although it touches on such matters as corporate financing and the holding company organization, as well as the personalities behind the electric industry, it does not go into the controversial "power issue." There is something about the simple approach from the engineering side of the electric industry which makes such political discussion seem unnecessary and inconsequential. This is a book about men who dreamed dreams and did great deeds in the laboratories, in the field, and in the boiler room. What happened after the commercial enterprise which they launched and to which they so largely contributed collided with po-

Courtesy, The Washington (D. C.) Post

"IS HE EXPENSIVE TO RUN?"

litical realities would seem to be more properly a matter for another and probably less interesting book.

IN the light of sheer physical accomplishment in the American electric industry during the last sixty years, we may well wonder—along with Philip D. Reed and Charles E. Wilson, who pose this very question in their joint prologue to Mr. Hammond's book—just what marvels as yet undreamed of will mark the year 2000. Since electric power has in sixty years revolutionized transportation, illumination, standards of living, and urban organization to such an extent that the comforts of the humblest city dweller today surpass those of a nobleman in the bygone period, what can we expect to materialize during the next sixty years?

MEN AND VOLTS. By John W. Hammond and Arthur Pound. J. B. Lippincott Company, East Washington Square, Philadelphia, Pa. Price $2.50. January 29, 1941.

Tax Rises Curb Utility Rate Cuts

LARGE increases in local, state, and Federal taxes in recent years, far outstripping rises in annual revenues, have made it progressively more difficult to obtain reductions in gas, electric, telephone, and water rates, the New York Public Service Commission declared in its annual report to Governor Lehman and the state legislature, made public on February 23rd.

Citing the cases of gas and electric utilities in New York city, the report said that their total tax burden increased almost 189 per cent between 1925 and 1939, while annual revenues increased only about 34 per cent. Total revenues of all gas and electric utilities in the city, according to the report, rose from $240,743,082 in 1925 to $322,316,524 in 1939, while taxes paid by the companies rose from $20,408,548 to $58,943,041 during the same period.

"The situation with respect to gas and electric utilities in the state outside New York city," the report said, "has followed a similar trend." Gas and electric utilities in the metropolitan area of New York, the report declared, paid in taxes an average of 18.29 cents out of every revenue dollar in 1939, as compared with 8.5 cents paid in taxes by the same utilities in 1925. In the case of the electric companies, the report said, the ratio of taxes to revenues has in some cases risen as high as 23 cents out of every revenue dollar. The report stated:

> During the last ten years the public service commission has maintained an aggressive policy designed to reduce rates and charges of utilities under its jurisdiction. In the aggregate, these reductions over the ten years since 1930 have saved utility consumers approximately $375,000,000. The commission's efforts in this respect have not diminished, yet in recent years the task has become progressively more difficult due to the mounting burden of taxation upon utilities.
>
> A point has now been reached where the question of rate reductions depends to a large extent upon the taxes utilities under the commission's jurisdiction must pay annually. The time-worn adage that one cannot eat his cake and have it is still true and applies with equal logic to attempts to increase taxes upon utilities while at the same time demanding that rates be reduced in order to benefit consumers.

THE report said that the New York Telephone Company paid 9.53 cents out of every revenue dollar to meet taxes in 1925, while in 1939, 16.05 cents of each revenue dollar was applied to the same purpose. The figures cited by the commission apply to the company's statewide operations.

The commission noted that the disparity in the growth of taxes and revenues is even greater than appears from a percentage comparison. The increase in 1939 revenues over those of 1925, the report pointed out, was not due to higher rates but to increased sales of gas and electricity, while in many instances additional plant facilities were required to meet service demands, necessitating additional capital investment. The report declared that "the increased costs in obtaining the increased revenues have not been considered in this analysis, while the increase of nearly 189 per cent in taxes is absolute."

The commission said that the present situation, with taxes representing from 15 to 20 per cent of gross revenues of utility companies, seriously affects the validity of many rate comparisons. It does not necessarily follow, the report stated, that rates in any given community are excessive and should be reduced, merely because they are higher than the rates charged elsewhere.

Referring to the prevalent practice sponsored in some instances by Federal agencies of comparing rates in various cities and regions, the New York commission said:

> Such comparisons are frequently made and in some instances fully warrant the conclusions drawn, but if one wishes to be fair he must first determine whether conditions are similar. If a plant has to pay no taxes it is apparent that the rates charged could be 20 per cent lower than in the case of a company that has to pay taxes amounting to 20 per cent of its gross revenues. Seldom is the difference so great as in this supposititious case, but it is unfair to compare rates unless

there is an equality of conditions and this applies to taxes as forcibly as to cost of coal, wage rates, and character of service.

In the report the commission noted its belief that it must still be governed by basic principles of rate making, including the right of the utility company to a fair return on the fair value of property used and useful in rendering public service. Arbitrary rate reductions, forced upon the utilities, will defeat the major purpose of assuring efficient, safe, and continuous service to the public, the report contended.

Notes on Recent Publications

ELECTRIC POWER REQUIREMENTS AND SUPPLY IN THE UNITED STATES. National Defense Power Survey. Federal Power Commission, Washington, D. C. Price 50¢. When ordering, refer to FPC P-7. December, 1940.

This report presents information in tabular and graphic form showing the past and probable future electric power requirements and supply in the United States through the year 1942. In addition to the summarized information by power supply areas presented in former reports, this report shows October, November, and December, 1940, data separately for each major utility system.

HOUSE OF FIELD, INC. Book publishers, 19 West 44th Street, New York, N. Y.

In a letter to editors of publications in the public utility field, the House of Field, through its president, Rudolph Field, "invites outstanding leaders in the utility field to submit their manuscripts for his consideration." If a suitable book can be found, the House of Field will include it in its fall list. Mr. Field suggests "something thorough, something well presented, something interesting; otherwise, no restrictions as to style or content." The invitation is extended "in the interests of fair play," because of the preponderance of antiutility literature and propaganda during recent years which, according to Mr. Field's circular letter, have resulted in few avenues of expression remaining open to public utility officials.

STATE COMMISSION JURISDICTION AND REGULATION OF ELECTRIC AND GAS UTILITIES. Federal Power Commission, Washington, D. C. 51 pages. Price 25¢. When ordering, refer to FPC S-10. January, 1941.

This publication was compiled to meet administrative needs for information on state commission jurisdiction and regulation of electric and gas utilities by Federal and state agencies. It was compiled by the staff of the Federal Power Commission and has been made available to the general public at a nominal charge. It presents the results of a survey of the nature and extent of regulation by state agencies under existing laws. The laws are not quoted verbatim, but are briefly digested in textual and tabular form. The data shown were submitted to the state commissions for final verification and approval prior to publication.

The powers of state commissions to regulate electric and gas utilities are presented through text and tables in the report in the following sequence:

Part I, Regulation of Privately Owned Electric Utilities.

Part II, Regulation of Municipally Owned Electric Utilities.

Part III, Regulation of Privately Owned Gas Utilities.

Part IV, Regulation of Municipally Owned Gas Utilities.

Part V, Regulation of Natural Gas Production.

Part VI, Regulation of Other Than Electric and Gas Utilities.

THE WHEELER PROJECT. Tennessee Valley Authority Technical Report No. 2. 362 pages; 147 illustrations. Clothbound copies, $1 each. Superintendent of Documents, Washington, D. C.

This report was published by the TVA to give to the engineering profession and the general public facts about the planning, design, and construction of the Wheeler project on the Tennessee river. This volume is the second of a series of TVA Technical Reports, the first of which is The Norris Project report, published in 1939.

The report covers the history of the Tennessee river development and describes the part that the Wheeler project plays in this development; the Wheeler project investigations, including social and economic studies; lock, dam, and power house designs; access roads; employee housing, construction methods, including construction plant and river diversion; reservoir adjustments, such as reservoir clearing and highway and railroad relocation; initial operations; and a complete summary of construction costs. Appendices include a complete statistical summary of the physical features of the project; copies of the engineering and geologic consultants' reports; and summaries of special tests such as model studies. Comprehensive bibliographies on each phase of the work are also included.

The March of Events

Fontana Dam Abandoned by Alcoa

THE Federal Power Commission recently announced that it had received notice that the Nantahala Power & Light Company, subsidiary of the Aluminum Company of America, had abandoned intentions to construct a $35,000,000 hydroelectric project in western North Carolina. No reason for the action was given in the notice but the Nantahala Company, with headquarters at Franklin, North Carolina, has been contesting an FPC decision that a Federal license was necessary for construction of the Fontana project.

The Nantahala Company has contended the Little Tennessee river, on which it would build the 300,000-horsepower plant, was non-navigable and therefore a permit was not required under the Federal Power law controlling hydroelectric projects on navigable streams. The commission, however, had asserted that the Little Tennessee had been navigated by "steamboats, gasoline towboats, and other river craft."

The Fontana dam was proposed as an addition to projects now under construction by Nantahala in North Carolina—one known as the Nantahala project on the Nantahala river in Macon county, and the other as the Glenville project on the West fork of the Tuckasegee river in Jackson county. The commission ruled these projects, on tributaries of the Little Tennessee, did not require Federal licenses. Subsequently, on last November 5th, the commission made its ruling in the Fontana Case.

Also tied up in the case is the proposal of the Knoxville Power Company of Tennessee, another Aluminum Company subsidiary, for construction of Chilhowee dam, a 45,000-horsepower project 26 miles downstream from Fontana.

"If the commission shall find that the operation of the Fontana project coupled with the reasonable operation of the Chilhowee project will not affect interstate commerce, then the Knoxville Power Company will proceed with the construction of the Chilhowee project," Nantahala said in its petition.

In a brief appearance on March 10th before an FPC examiner, Oscar R. Ewing, New York attorney for the company, contended Alcoa had a legal right to withdraw its declaration of intention, because of the commission's decision that a Federal Power license would be required.

Alcoa Gets Power Turndown

SECRETARY of Interior Harold L. Ickes last month refused to grant Bonneville power to the Aluminum Company of America for further expansion of its new multimillion-dollar plant at Vancouver, Washington. The revelation came in a statement made during a press conference, which was said to have turned up several other highly significant disclosures about Bonneville-Grand Coulee power.

According to the Associated Press, Ickes also said that the Henry J. Kaiser Company, San Francisco, wanted Bonneville power for the manufacture of magnesium. Ickes suggested that the Kaiser Company may contract first for power from a privately owned San Francisco utility, and later from the government-owned Central Valley project. He said if Kaiser locates in the Grand Coulee area of the Columbia river, public power will be available much sooner, since Grand Coulee would start operation March 22nd.

The Aluminum Company of America had opposed sale of Bonneville power to competitors, Ickes said, and had tried to persuade the Reynolds Metals Company, Richmond, Virginia, to abandon its recently announced plan for a $4,000,000 pig aluminum plant in the Bonneville area. The Reynolds Company, which signed a contract on February 24th for 40,000 kilowatts of Bonneville power for its initial plant, has since signed a second contract for an additional 20,000 kilowatts.

Explaining his refusal to grant added power to Alcoa, Ickes said he was merely following the "letter of the law" as laid down in the Bonneville Act.

Governor Charles A. Sprague, of Oregon, crossed verbal broadswords with Secretary Ickes over the sale of power from Bonneville. He said Ickes' action represented the danger of concentration of authority. Ickes subsequently denounced the governor as "an advocate of monopoly and holding company control" and characterized his criticism of power allocations at Bonneville as "an indirect attack on public ownership."

He asserted that if the Aluminum Company of America's request for more power had been met, "Bonneville would have been responsible for further entrenching that company in its monopolistic position."

Dr. Paul J. Raver, Bonneville Administrator, defended Secretary Ickes' refusal to grant

Bonneville power for additional expansion of the Aluminum Company of America's plant at Vancouver, Washington. He said criticism of Ickes' action by Governor Sprague and others sprang from misunderstanding of the Secretary's purpose. Raver said Ickes is "encouraging other industries to come to the Northwest, and I believe his position is sound."

Seeks Bonneville Appropriation

PRESIDENT Roosevelt on March 3rd requested Congress to appropriate $10,900,000 for expediting construction of the Bonneville power project "to meet unforeseen defense-industry demands at the earliest possible date."

Although Jesse Jones, Secretary of Commerce, and the Federal Power Commission both pointed out that in 1940 output and capacity attained the highest levels in the history of the electric power industry, the President's message indicated that the Portland, Oregon, and Seattle regions were confronted with "serious power shortages."

The increased generating facilities, Mr. Roosevelt explained, would be installed both at Bonneville and the Grand Coulee dam, but that an estimated $9,000,000 for three additional units at Grand Coulee would not be needed before the summer of 1942.

The FPC furnished figures to show that in January for the fourth consecutive month the average daily output of electric energy for public use had reached a record high level of 429,028,000 kilowatt hours. This figure was 1.0 per cent more than the average daily production in December, 1940, and an increase of 10.7 per cent compared with the same month of the preceding year. Aggregate production of electric energy for public use during January was 13,299,863,000 kilowatt hours, of which a total of 4,516,396,000, or 34 per cent, was produced through the utilization of water power.

Secretary Jones commented that "output, capacity, customers, and revenue all were the highest in the history of the power industry last year." He predicted that there would be an increase in electric power capacity in 1941 similar to that of last year. In 1940, he said, industry had accounted for about two-thirds of the increased demand and had taken about 50 per cent of the total energy sold.

Bonneville Administrator Raver, commenting on President Roosevelt's request for an immediate deficiency appropriation to speed work on Bonneville's distribution system, said:

"Construction of Bonneville and Grand Coulee is ahead of schedule. Our problem is to make this power available to consumers, particularly defense industries, just as fast as it becomes available at the generators."

Meantime, Army Engineers of the North Pacific district said the $7,642,750 requested on March 3rd for Bonneville construction would be used to continue work on the power house and start work on the last four generators of the 10-generator plant. Four generators are now in operation, and two others will be completed before January 1st. Construction schedule calls for completion of the last four in 1943.

FPC Attacks Political Activities

THE Federal Power Commission recently charged five electric utility companies operating in the Pacific Northwest with widespread political activity which one commissioner characterized as "subversive."

The charges were contained in an opinion of the FPC's investigation into the accounting disposition of political expenditures of the Portland General Electric Company, Washington Water Power Company, Northwestern Electric Company, Puget Sound Water & Power Company, and the Pacific Power & Light Company.

Commissioner John W. Scott suggested, in a strongly worded concurring opinion, that Congress might look into the "subversive activities" of the utilities. He charged they employed "subterfuge" to "pollute the political processes of free choice at public elections."

The commission found that the companies spent more than $1,000,000 for political activities between 1935 and 1940 and that they charged approximately one-half of that sum to the cost of consumer service. It said these activities included hiring of prominent citizens for "secret political services," financing of various "front" organizations, and providing "indirect subsidies to the organs of public opinion" by paying for extensive advertising and radio programs.

Scott suggested that Congress "may wish to notice the facts disclosed by this record and consider the necessity for appropriate action to protect the public investment and principles involved."

Four of the companies, in replies made public on March 5th to the FPC order, objected because the order did not apply, among others, to the Bonneville Power Administration. The statements were from the Puget Sound Power & Light Company of Seattle, the Pacific Power & Light Company, Portland, the Northwest Electric Light & Power Company, Portland, and the Washington Water Power Company, Spokane.

The statements argued that the commission was without authority to require an accounting of the intended expenditures and charged the order was unfair in that it did not apply to all companies under the commission's jurisdiction or to the Bonneville Power Administration and the light department of Seattle.

The companies charged that the Bonneville Administrator engaged in activities involving large expenditures of public funds for salaries and expenses of public employees for advertising, radio, printing, and miscellaneous ex-

penses "to distribute publicity and propaganda for the purpose of influencing and otherwise affecting political, legislative, public power, and other matters before the electorate or their representatives in public offices."

Insurance Curbs Urged

"STRENUOUS and prompt efforts" to strengthen state machinery for regulating and supervising life insurance companies, and the institution of Federal supervision limited primarily to advisory and informative functions "to plug the gaps where state regulation cannot do an effective job," were recommended recently to the Temporary National Economic Committee by Sumner T. Pike, a member of the Securities and Exchange Commission, and Gerhard A. Gesell of the SEC legal staff.

Although the Federal government should only "work with the states on a coöperative basis toward the end that the states may do a better job," Mr. Pike suggested that unless Federal action were taken "the weaknesses in the existing state regulatory system may lead to its eventual decay and public clamor will then arise for an all-inclusive Federal regulatory system." The life insurance business, however, is "generally healthy," he said.

The substitution of some governmental form of low-cost insurance for the privately handled industrial insurance was another recommendation. Mr. Pike and Mr. Gesell, who emphasized that their views were their own and not necessarily those of the Securities and Exchange Commission, said the SEC was too burdened with duties to undertake supervision of insurance companies. (See p. 417, this issue.)

TVA Tax Payment Large

THE Tennessee Valley Authority will pay Tennessee $246,549 and Tennessee counties $756,069 in lieu of taxes for the fiscal year ending June 30, 1941, TVA General Manager Gordon R. Clapp announced on March 10th. Total payments to 6 states and 111 counties for the period on the basis of final computations will be $1,499,417, the TVA statement said. They were made in accordance with the Norris-Sparkman amendment to § 13 of the TVA Act.

The figures announced applied only to the authority's payments in lieu of taxes, it was pointed out, and do not involve the taxes and tax equivalents provided by municipalities and coöperative associations distributing TVA power, which are now being paid in an amount in excess of $1,800,000 annually.

Kentucky will receive $28,096; Alabama, $321,799; Georgia, $64,841; Mississippi, $48,-174; and North Carolina, $33,889. Tennessee's share was two-thirds of the total of $1,499,417 to be paid.

SEC Urges Sharp Cuts

THE Securities and Exchange Commission recently received from its public utilities division a set of recommendations on the problem of integration under the Holding Company Act of the Engineers Public Service Company, which, if accepted, would require the company to divest itself of all of its widely situated operating utilities, except either the Virginia Electric & Power Company, or the Gulf States Utilities Company, and possibly some minor properties in states contiguous to, or in which these two companies operate.

Arkansas

Amendment of OVA Rights

THE power of eminent domain of the Ouachita Valley Authority, proposed in S. B. No. 186 by Senator Byrd of El Dorado, would be limited to the condemnation of only property necessary for the construction and operation of the Blakeley dam northwest of Hot Springs and of a steam-electric power plant in southern Arkansas, under one of 15 amendments adopted by the state senate on March 5th.

At a public hearing early this month a spokesman for the Arkansas Power & Light Company declared the power of condemnation proposed for the OVA would permit it to deprive the company of its generation systems at Carpenter and Remmel dams and leave it only a distribution system.

Another amendment would reinforce the declaration of the act that it would "in no way interfere with the proposed Arkansas Valley Authority," now pending in Congress. Supporters of Representative Clyde Ellis' proposed Federal AVA asked for the amendment. The other amendments made minor changes in the phraseology of the bill and:

Extended the area of the authority to include Union, Saline, Clark, Dallas, Calhoun, Bradley, Ashley, and Pike, as well as Columbia, Garland, Hempstead, Lafayette, Miller, Montgomery, Nevada, and Ouachita counties.

Provided that the directors of the OVA receive $20 *per diem* rather than $7,500 a year.

Struck a provision that no member of the board may engage in other business activities.

Would require the board to hire a manager at a salary to be determined by the board who would select other personnel.

Would limit the development to the Ouachita river only.

Would prevent the OVA from interfering

with municipally owned electric power plants.

The bill would set up a $20,000,000 authority to develop the Ouachita river and to construct the two power plants. South Arkansas "sour gas" fields would be utilized in the steam power plant.

Governor Adkins has expressed satisfaction over amendments to the bill. He said construction of Blakeley dam and a steam electric plant to utilize "sour gas" in south Arkansas would constitute a major development in Arkansas' industrialization. If the Arkansas Power & Light Company is not going to build Blakeley dam, he said, it should be decided immediately that another party will construct it.

Water Planning Bill

THE establishment of a state Water Resources Commission to survey the water resources of the state and plan for their protection and development was called for in S. B. No. 310 introduced in the state senate by Senator Mitchell of Prescott on March 3rd. The bill incorporated recommendations and suggestions of conservation and flood-control experts from Louisiana, Texas, Oklahoma, and Arkansas made at a 2-day meeting in Hot Springs shortly before the legislature was convened.

The commission would be empowered, among other things, to build and maintain and operate canals, dams, locks, reservoirs, and other necessary appurtenances; to divert waters from streams by canals; to build and maintain power dams; to manufacture and distribute water, steam-electric, and hydroelectric power; to reclaim and drain swamp lands; to borrow money; and to investigate all undeveloped power sites and irrigation projects in the state.

Commissioners Resign

RESIGNATIONS of Thomas Fitzhugh, state public utilities commission chairman for the past four years, and of Dr. H. W. Blalock, commission member for the same length of time, were submitted at Governor Adkins' request on March 5th.

Chairman Fitzhugh said he previously had informed the governor's office that he would retire if Mr. Adkins wished. His resignation will be effective April 15th. Mr. Fitzhugh plans to reënter law practice.

Dr. Blalock, whose resignation will be effective May 1st, has been in state service for ten years. He was associate professor in the department of rural economics and sociology at the University of Arkansas College of Agriculture for two years before his appointment to the commission.

Dr. Blalock, whose letter said "it may be desirable for me to terminate my position" before May 1st, announced no future plans.

The request was "no personal reflection" on the commissioners and involved "no difference in policies," Governor Adkins said. Efforts to industrialize Arkansas, his major concern after the legislature adjourns, will include the "promulgation of a power program," the governor said. "It will be my responsibility, and I want the commissioners to be men with whom I have been associated," he said.

A third commissioner, Max Mehlburger, also appointed by former Governor Bailey, whose term expired, was replaced by A. B. Hill of Little Rock on January 14th.

Each commissioner receives a salary of $5,000 a year.

Persist in Utility Plan

THE Little Rock city council will continue its efforts to acquire the distribution system of the Arkansas Louisiana Gas Company in that city despite the state senate's defeat of S. B. No. 225 which would have permitted cities to issue revenue bonds to buy or construct gas or electric plants, it was recently announced by Alderman Emerson, chairman of the council's utilities committee.

The distribution properties may be acquired under provisions of Act 324 of 1935 which authorizes municipalities to obtain by purchase or otherwise any public utility plant, Mr. Emerson said. A public hearing, preceded by a 30-day notice, would be necessary before the council could vote for the proposed acquisition. The council's action would be submitted to a vote of the electorate. If the city and the company were unable to agree, the price would be fixed by the state utilities commission.

The council had sought passage of the senate bill to remove any question of legality of issuance of revenue bonds under the 1935 act which makes no provision for payment of the purchase price. Lawyers told the aldermen they believed revenue bonds would be legal but suggested that bond lawyers might require a test suit before approving the issue.

California

Receives Official Lease

CITY officials on February 28th received the formal lease from the Pacific Gas and Electric Company under which San Francisco will undertake municipal distribution of power next July 1st. Working against a March 7th deadline set by Secretary of Interior Harold Ickes, City Attorney O'Toole on March 3rd said the lease was far from acceptable to the

city. Mayor Rossi asked Ickes by telephone to extend the "deadline" date. The city was preparing an alternative contract to replace the one drawn by PG&E attorneys, he said.

Ickes had threatened to shut off a $200,000 monthly income the city receives from PG&E for sale of Hetch Hetchy power unless the lease was submitted by March 7th. The lease is drawn for a 10-year period, but can be canceled on six months' notice by either party.

Utilities Manager Cahill said he was particularly concerned over the absence of a provision in the lease submitted by PG&E which would give the city control over the construction and maintenance of additions and betterments to the system. He said it had been agreed verbally that this provision would be made a part of the lease.

Connecticut

Utility Laws Hit

PROPOSED sweeping changes in public utility control in the state, including measures introduced by the Hurley administration, received but comparatively little vocal support at hearings before legislative committees on March 7th and ran into opposition from the various utility companies.

Senator Alfred M. Bingham, Democrat of Salem, chief spokesman for a bill permitting the organization of rural electrification coöperatives, admitted under questioning by Senator John A. Holbrook, Republican of Westbrook, that he had no practical experience with such projects, had never tried to work out rates, and that he based his arguments on a book on the work of the Federal rural electrification efforts.

Not one at the hearing spoke in favor of a bill to carry out the recommendation of Governor Hurley for periodic audits of utility companies at the expense of the companies, but Lawrence A. Howard, representing the Connecticut Light & Power Company and other utilities, asserted the measure was practically a copy of the New York law, except that the Empire state statute is permissive and sets a top limit on the costs of such audits.

During a discussion of a measure to change the present law on acquisition of utilities by municipalities, Mr. Howard, opposing the particular measure as one permitting too hasty action, admitted that the present law, requiring two votes by two-thirds majorities in successive years by the municipal legislative body before the proposal can be submitted to the people, was too strict.

Senator Bingham said Connecticut was one of four states without rural electric coöperatives, and that the bill was a permissive one, authorizing groups to unite for such projects with the help of what he called "cheap Federal money." Public Utilities Commissioner Joseph W. Alsop, without expressing himself specifically as either for or against the bill, gave the committee statistics showing that since May 1, 1932, private companies have built 1,781 miles of rural lines and only 942 miles of construction are necessary to make electricity available to all areas where potential customers exist at a rate of three or more to a mile of road. There are now 4,423 potential customers in such areas, he said, of whom 2,242 are farmers, and he predicted this construction would be completed by 1944 or sooner.

Mr. Howard, asserting his clients did not object to rural electrification, attacked the provisions of the bill, claiming it would permit any five persons, even "tramps" to get a charter and string wires on bean poles through Main street, Hartford. Under the bill, he said, the existing utilities could become coöperatives and get statewide eminent domain powers and freedom from control of the state public utilities commission on control of rates and standards of service and safety.

Another rural electrification bill, drafted by Representative Paul O. Holdridge, Democrat of Ledyard, has much good in it, according to Commissioner Alsop. The Holdridge bill would permit any individual, partnership, or corporation to sell electricity to less than 10 houses.

A bill to carry out a Democratic platform pledge to have public utilities commissioners elected by the people was held to be a probably ineffective attempt to do something that requires an amendment to the state Constitution by Vincent P. Dooley, Democrat, New Haven corporation counsel, who favored popular election of the commissioners.

Calvin Sutherlin, representing the CIO and Labor's Non-Partisan League, was among those advocating popular election of state commissioners, charging that the present board does not represent the public and "works hand in glove" with the utilities.

Measures to bar utility companies from selling appliances, in addition to opposition from representatives of the companies, also were opposed by master plumbers and representatives of several companies who said the advertising by the utility companies aided sales of others.

Rate Reduction Announced

THE United Illuminating Company, serving New Haven, Milford, Bridgeport, and surrounding towns, will give its customers a 40 per cent reduction on their May bills, the state public utilities commission announced on March 4th. The estimated total savings to consumers will be $376,000.

The commission announced also that the firm had filed a new rate scale applicable to 56 in-

dustrial consumers which would be effective as of February 1st and result in annual savings to this group of customers of $25,000.

The reduction in the May bills will be similar to a reduction given its customers by the Hartford Electric Light Company last October. R. C. Schneider, secretary of the commission, said the bill rebate for one month would be in lieu of a rate reduction, which the company opposed because of uncertainty of conditions which might affect its business in the future.

Both the May rebate and the industrial rate reduction by United were the result of voluntary negotiations between the commission and officials of the company. Similar negotiation in the past four years resulted in rate adjustments in 1937, 1938, and 1940. These adjustments resulted in savings to domestic customers of about $510,000 yearly and to industrial customers of about $190,000.

District of Columbia

Nominates Commissioner

PRESIDENT Roosevelt recently nominated Gregory Hankin, a native of Russia who came to this country at the age of thirteen, to fill the unexpired term of Richmond B. Keech on the District of Columbia Public Utilities Commission. Mr. Hankin came to Washington in 1920 to teach philosophy and mathematics at George Washington University, after graduating from the City College of New York and from the Harvard Law School.

In 1924 he became a special assistant to the Attorney General, was later with the Bureau of Internal Revenue, then in private practice, and since 1937 has served as special counsel for the Federal Power Commission.

There is another vacancy on the commission owing to the death last month of Riley E. Elgen, chairman of the commission.

Indiana

Gas Utility Sold

PURCHASE of the Richmond gas plant from the Indiana Gas Utilities Company was completed on March 5th at Indianapolis with the transfer of the deed to the newly formed Richmond Gas Corporation. The state public service commission recently approved the purchase for $550,000.

Officers of the plant under its new management include: Ralph H. Beaton, head of a gas company at Kokomo, president; Anton Hulman, Jr., Terre Haute, manufacturer, vice president; and R. W. Reller, Richmond, attorney, secretary. The new manager will be Elmer E. Lindburg.

The company was said to be negotiating for a contract with a firm supplying natural gas from Texas, Kansas, and Oklahoma fields to Indiana companies and companies in Detroit, and Columbus, Ohio. These plans, however, would have to be submitted to Richmond's common council and to the state commission for approval.

Kentucky

New Power Bill

EARLY enactment by the 1942 general assembly of legislation to enable Kentucky municipalities to contract for Tennessee Valley Authority power seemed assured recently with the announcement by Governor Keen Johnson that his administration would coöperate in drafting the legislation and with a promise by Lieutenant Governor Rodes K. Myers that he would aid in passage of the legislation.

State Representative Henry Ward of Paducah, after a conference with the governor, said the governor had told him the state public service commission had been instructed to obtain all possible information as a basis for preparing a bill. Ward also quoted Johnson as saying the state had an obligation to study the problem and seek its solution.

Ward also stated that John Kirtley, state public service commission chairman, told him that after the information had been gathered, the commission planned to ask for conferences with officials of the TVA, of Kentucky cities, and with other interested persons.

Ward was sponsor at the 1940 legislative session of an act to give Kentucky cities the right to contract for TVA power. It was defeated in the house.

Liable for Utility Tax

CONTRACTORS building homes, commercial structures, and highways are liable for

the state 3 per cent tax on electricity and gas used, Assistant Attorney General Lewis said recently. The exemption given manufacturers does not apply to these contractors.

Dam Plan Endorsed

A PROPOSAL requesting that the next state general assembly endorse and approve construction of a $10,000,000 hydroelectric power plant at the Jews Harp dam on Barren river, near Holland, Allen county, was endorsed recently by Allen Circuit Court.

The court's action, on a motion by Magistrate Walter M. Lambert, came on a proposal by State Representative Charles M. Carter, who said it would require three years to build the plant.

Maryland

Emergency Rate Decreases

JOSEPH Sherbow, people's counsel, last month sent a bill providing for emergency decreases of public utility rates to Thomas E. Conlon, speaker of the house of delegates. In a letter to Mr. Conlon, Mr. Sherbow explained that "up until now the law only allows public utilities to obtain emergency increases. Obviously, such a situation should not be allowed to continue as it provided only for the protection of the public utilities in time of emergency with no similar protection to the public."

Mr. Sherbow said his bill "follows the Virginia and Illinois statutes which have been upheld by the courts. If adopted by our state, our public service commission may grant an emergency decrease in rates after a public hearing."

Mr. Sherbow said he had appeared before the house committee on corporations with regard to such a bill and at the committee's suggestion he was asked to draft it.

Michigan

Gas Hearing Postponed

THE March 3rd scheduled hearing on the protests of the city of Detroit and the county of Wayne against the order increasing house-heating rates of the Michigan Consolidated Gas Company was postponed until April 21st by the state public service commission at the request of James H. Lee, Detroit assistant corporation counsel, and William E. Dowling, Wayne county prosecutor.

The Detroiters pointed out that they had requested the Federal Power Commission for an investigation of "gate rates" and expressed the belief nothing further should be done in the state case until it is known when the Federal body will be able to make a determination.

The commission ordered the new rates, which increase house-heating charges in the metropolitan area by $500,000 a year, to become effective January 4th. On petition of the city and county, the effective date was set back to May 1st. The representatives of Detroit and Wayne county are now asking that the effective date be further postponed until August 1st. Park Chamberlain, attorney for the gas company, protested on the ground that such a deferment would cost the gas company from $75,000 to $100,000.

The commission took no action on the request for further postponement, but indicated that the request probably would be granted if it is found the Federal commission will not be able to act by May 1st.

New York

Rate Reduction Approved

THE state public service commission on March 4th approved a $1,200,000 annual reduction in electric rates of the New York State Electric & Gas Corporation. At the same time the company announced a $2,500,000 to $3,000,000 "change-over" program, transferring the 25- and 40-cycle frequency service to 60-cycle service in various districts.

The company told the commission it was gradually changing its 25-cycle service in the Oneonta and Auburn districts and its western division over to 60-cycle service.

Meanwhile, the commission announced discontinuance of a previous rate case against the company, and ordered it to file a statement of the 1941 work program in changing over to 60-cycle service.

The corporation serves Binghamton, Brewster, Chatham, Elmira, Geneva, Granville, Hornell, Ithaca, and nine other communities.

North Carolina

Utility Board Approved

REORGANIZATION of the utilities commission to substitute a 3-man body appointed by the governor for the present single elected commissioner received unanimous approval of the joint legislative committee on public utilities recently and was passed by the senate without debate on March 5th.

Commissioner Stanley Winborne, elected to office, told the committee that Governor Broughton approved the bill and had told him "he had always thought this commission ought to be appointed." The bill gives Winborne a 6-year term as chairman of the new commission at his present salary of $6,600 a year.

The two appointed commissioners would get $6,000 a year and the first appointees would serve 2- and 4-year terms, respectively, after which the chairman and each commissioner would serve 6-year terms.

House Kills Power Project

HIGH Point's newest effort to clear the way for erection of a PWA-financed hydroelectric power plant met death on March 12th at the hands of house judiciary committee No. 2, of which Representative Rupert Pickens of High Point, Guilford county, is chairman.

The city sought a new law to relieve it from having to get a certificate of convenience and necessity for its project first envisioned some six years ago.

The committee considered the measure in a 2-hour executive session, then voted 10 to 8 to report it unfavorably. It would take a two-thirds vote of the house members to put the bill on the favorable calendar for debate and action.

The High Point project, which called for the erection of a $6,500,000 hydroelectric plant, had been before every session of the state general assembly since and including the 1935 session, and has been in the courts almost continuously since that time.

The defeated measure was designed to meet a ruling of the North Carolina Supreme Court on January 31st that High Point must secure a certificate of convenience and necessity. This requirement, proponents of the project have contended, would permit the Duke Power Company, which has fought the project, to prolong litigation indefinitely.

The Federal government has already advanced one million dollars for the project which was well under way when halted by the courts.

The special hearing on March 12th was originally scheduled for the thirteenth but the committee in secret session moved the date up the one day in order for a fair chance of the bill passing—if favorably approved—before adjournment of the general assembly.

Ohio

Refund Tentatively Settled

TENTATIVE settlement of the 15-year-old impounded money case was recently agreed upon by the Columbus city council and the Ohio Fuel Gas Company with the $1,939,202 being divided between consumers and the utility. Approximately $1,400,000 would go to consumers of the 1925-27 period and the company would receive $439,202. A balance of $100,000 would be used for court costs and to meet the rate refund distribution expenses.

Average refund to consumers of gas during the 1925-27 period would be about $20. This was the figure the council expected the company to submit.

The settlement affected only the impounded money case in the court of Federal Judge Mell G. Underwood. For several years it has been in the hands of Gail Butt, special master. The money was impounded as the result of a 1924 rate ordinance.

Oklahoma

Motor Carrier Regulation

A BILL introduced in the state house of representatives just before the recess would provide the "means for proper regulation of the motor carrier industry in Oklahoma," Reford Bond, chairman of the state corporation commission, said recently. Describing the present laws as antiquated, Bond said representatives of the commission, of the railroads, and of the motor carriers had described the measure as "model legislation."

"Present laws do not provide for adequate enforcement," Bond said, commenting that the present motor carrier law was enacted in 1923, when the industry was in its infancy. He claimed that under present statutes, only those operators who voluntarily place themselves under jurisdiction of the corporation commission are subject to regulation, explaining that

enforcement is left to county attorneys and the highway patrol.

The bill would create a staff of six inspectors to act as enforcement officers, Bond said, "and would make every truck or bus operated for hire subject to regulations, insuring blanket protection to the public and preventing discriminatory charges."

To finance the proposed law, the bill sets up annual fees of $10 for each motor bus, and $5 each for trucks, truck-tractors, trailers, and semitrailers, which would be in addition to other fees required.

The bill would apply only to contract and common carriers. Bond listed one of the aims of the bill as the breaking down of trade barriers which exist "in the form of conflicting state motor carrier regulations and those of the Interstate Commerce Commission."

Governor Reopens Feud

GOVERNOR Leon C. Phillips on March 1st reopened his old state's rights feud with the government—this time over the $56,000,000 Red River dam on the Texas-Oklahoma border. He ordered U. S. Army Engineers at the dam site to stay off state lands in the area pending arrangements to compensate the state for "losses we will suffer."

Governor Phillips, who also fought the government over the $22,000,000 Grand River dam project in northeastern Oklahoma, arrived unheralded and went directly to the Engineers' office a quarter of a mile from the dam site, and delivered his ultimatum.

Oregon

Tax Called Blow

REPRESENTATIVES of public power systems and private utilities operating outside Multnomah county appeared at a hearing called by the state house taxation and revenue committee recently in opposition to a bill to levy a 12 per cent tax on the sale of electric energy. The committee subsequently voted to pass out favorably an amended bill which would levy a 12 per cent tax against electricity retailed by public systems.

Opponents of the bill at the hearing charged that it would benefit the big Portland companies, Portland General Electric and Northwestern Electric, at the expense of public systems and smaller, upstate privately owned power companies. The proposed bill, a substitute for a measure introduced by Senator Ronald Jones, Republican, Marion, and Representative Angus Gibson, Republican, Lane, would levy a 12 per cent tax on retail electric energy, to be paid by the seller.

The tax would be in lieu of ad valorem taxes assessed on property used in the generation and distribution of electricity. Companies would be required to reduce their rates to consumers in proportion to the benefit, if any, resulting from the changed tax status.

Officials of Mountain States Power Company declared that their tax rate would be raised as much as 50 per cent. Other witnesses said PGE and Northwestern would be able to reduce their rates to be in a better position to forestall public ownership inspired by Bonneville if the proposed bill were approved.

As amended, privately owned power companies would continue to pay ad valorem taxes, but public agencies not on the real property tax roll would pay the 12 per cent levy.

South Carolina

Utility Property Purchase

IT was recently rumored that an agreement had been reached under which the South Carolina Public Service Authority (Santee-Cooper) would purchase the properties in South Carolina owned by the defunct Associated Gas and Electric Company of New York city.

These properties were said to be those of the South Carolina Electric & Gas Company, Columbia, and the Lexington Water Power Company, which owns the Lake Murray hydro-electric development, 16 miles north of Columbia.

There were reported to be legislative barriers at present that could prevent consummation of the agreement, but sponsors were hopeful they could be removed.

The negotiations have been carried on in behalf of the authority by Governor Burnet R. Maybank, and representing the properties have been Willard Thorp and Denis J. Driscoll, of New York, receivers for the large utility holdings of the AG&E, now in receivership.

The negotiations for the purchase of these properties started in 1939, shortly after Mr. Maybank was inaugurated as governor. It was understood the price to be paid would be around $41,000,000, and that the funds would be obtained from the Reconstruction Finance Corporation.

The agreement, it was said, may run into legal or other barriers.

Texas

REA Projects Get Power

DIRECTORS of the Brazos River Conservation and Reclamation District last month voted to supply power at cost to 15 rural electrification projects within a 100-mile radius of the Possum Kingdom dam site, according to Lewis Mims, president of the board of directors.

G. A. Tunnell, Stephenville, project superintendent of the Erath County Electric Coöperative Association, announced that the 15 REA coöperatives within a 100-mile radius of the dam site would incorporate immediately to carry out plans for power distribution.

Offers to buy the entire output of the dam by the Texas Electric Service Company were rejected by the directors, according to Tunnell.

Utah

Supports Power Program

RECOGNIZING that Utah's future rests in the development of cheaper power and in the utilization of the waters that rightfully belong to the commonwealth, Governor Herbert B. Maw recently pledged the state to spare no effort to accomplish the objective.

Governor Maw promised his fullest support and coöperation to the officers and directors of the Colorado River-Great Basin Water Users' Association at a meeting in the state capitol. Ora Bundy of Ogden, president, and Leland H. Kimball of Salt Lake City, engineer manager, explained the group's accomplishments and some of their problems, after which the governor addressed the group.

The association's efforts have thwarted what might have been Utah's loss forever of its potential rights and interests in the waters of the Colorado, Mr. Bundy told the governor. "Most certainly our efforts resulted in transfer of an additional $1,000,000 to the further investigation and development of the upper basin states," he added. The president reported that the association had filed on 1,000,000 acre-feet of water and upon every power site which might be developed under the present project. Development of thousands of fertile acres west of the Wasatch range awaits the fruition of the association's program, Mr. Bundy noted.

Governor Maw said such a program could only be accomplished with cheap power. "We know that we will never be able to get private industry to come here until we can give them power on a basis that will be comparable with the surrounding states. As far as I am concerned, I promise you that I will coöperate 100 per cent."

The governor sounded a warning that Utah must act immediately to stop the inroads that California and the Pacific Northwest have made in luring new industries through the magnet of cheap power.

Washington

PUD Takes Plant

ALL technicalities in the way of continued operation by the Cowlitz County Public Utility District of the Longview power plant had been removed as the result of the recent failure of the Washington Gas & Electric Company to appeal a Federal court action which turned the properties over to the district.

The Federal award was made November 26, 1940, and the 3-month limit for the appeal ended on February 26th with none being filed, it was reported from Tacoma.

The PUD has been operating the plant since a Federal jury in Tacoma held in November that the private firm should accept $6,293,377.76 for the purchase of its properties by the public district. The district subsequently deposited this amount with the clerk of the United States District Court in Tacoma.

The effect of the company's failure to appeal, as it had announced it would previously, was to clear the way for the sale of the remaining $600,000 of the $6,600,000 in bonds which the PUD issued to finance the condemnation and purchase of the properties.

Power Plant Voted Down

AFTER a spirited campaign, in which figured accusations of political activity by utilities on the basis of FPC reports, as well as pro-public ownership speeches from officials of the Bonneville Administration, the voters of Spokane on March 11th turned down a proposal to acquire the local distribution facilities of the Washington Water Power Company, by a margin of more than 3 to 2. Out of a total of 43,888 votes cast, 26,609 were against and 17,279 were in favor of the proposition.

Immediate reaction to the result in some quarters was that the voters had rebelled against "attempted dictation from Washington, D. C."

The Latest Utility Rulings

FPC Exclusive Accounting Control Upheld

THE United States Court of Appeals for the seventh circuit, in a recent opinion by District Judge Lindley, ruled that the FPC had authority to order the Northern States Power Company to write out of its accounts items of claimed capital investment which the FPC found to be fictitious. The company did not contest the validity of the FPC's finding as to original cost on certain Wisconsin construction (disallowing claims aggregating $208,526.72), but did contest the refusal of the FPC to allow charging such items to surplus. The court stated in part:

> There is no express statutory mandate requiring a licensee to make its books conform to the commission's determination of actual legitimate original cost. But . . . if the commission is intelligently to exercise its extensive regulatory and supervisory power, it must have been intended that it shall have power to do everything essential to the execution of its clearly granted powers and the achievement of the purposes of the legislation. . . . It is only reasonable that, in order properly to perform its duties, the commission may establish uniform accounting and direct elimination of items found not to constitute real assets. . . . It is likewise urged that to enforce the portion of the order complained of is to infringe upon the jurisdiction of the public utility commission of the state . . . but, as the commission itself commented, the order is in no wise binding upon the Wisconsin commission; nor the act of the latter binding upon the former. The system of accounting prescribed by the commission does not preclude accounting regulation by the state body. The act plainly indicates the contrary. . . . Each commission is empowered to act within its own field. Petitioner insists further that the order invades the field of management. . . . It merely carries to completion the statutory duty of finding of cost of construction by directing petitioner to enter upon its books the determined cost.

Northern States Power Co. v. Federal Power Commission. (February 28, 1940.)

Sale of Power to Interstate Company Creates FPC Jurisdiction

A GENERATING company, although physically confined to intrastate operations with respect to its own facilities, was nevertheless found to be subject to regulation by the Federal Power Commission, because the power it sold was found to be resold by the purchaser in interstate commerce. Such is the ruling of the Federal Power Commission with respect to the Hartford Electric Light Company, which generates electric energy in Connecticut and sells power at wholesale to the Connecticut Power Company. The Hartford Company does not even operate ordinary transmission facilities, but makes delivery at the bushings on the walls of its generating plant. The Connecticut Company, on the other hand, belongs to a pool in which Connecticut and Massachusetts electric company members exchange power. As a result of such exchange, unquestionably, part of the power purchased from Hartford found its way into Massachusetts markets, although evidence failed to indicate the exact proportions.

The case arose when the Hartford Company declined to comply with accounting orders of the FPC, which are applicable to every company owning or operating facilities "subject to the juris-

diction of the commission." The FPC report stated in part:

> The transmission of electric energy from Hartford's generators to the Massachusetts members of the exchange is direct and almost instantaneous. Among the facilities owned and operated by Hartford . . . are the facilities from the connections on its generators to the bushings on the wall of its steam generating plant. In this transmission the voltage of the guiding system is changed by means of transformers in the Connecticut Power Company's substation, and the conduction current is correspondingly changed, but this does not change the fact that the facilities owned and operated by Hartford are used in the transmission and sale of electric energy between Hartford and the Massachusetts members of the exchange. . . . The record clearly shows that part of the electric energy which the Hartford sells is ultimately consumed in Massachusetts. . . . There is no interruption in the transportation or transmission of the electric energy, and the tranformers are an integral part of the system by means of which the energy sold by Hartford is transmitted to and resold for consumption in Massachusetts. . . . Upon the facts found herein, we are of the opinion . . . that electric and other facilities owned and operated by Hartford are used in the transmission and sale of this energy. . . . Clearly, the facilities in question are not used for local distribution, nor are the facilities between the generators and the bushings on the wall of the steam generating plant used for generating electric energy . . . .
>
> These physical facilities (just referred to) are only some, but by no means all, of the facilities used in the sale of electric energy. The entire corporate organization of Hartford, its contracts, its books of account, its instrumentalities for billing and collecting, as well as its electric facilities, are used in the sale of electric energy in interstate commerce . . . .

It is noteworthy that § 201(b) of the Federal Power Act gives the FPC jurisdiction over all facilities used in the transmission or sale of electric energy in interstate commerce but not "over facilities used for generation of electric energy . . . in local distribution or . . . in intrastate commerce." The commission said that this section did not exempt generating facilities, because the exemption was limited by the words "except as specifically provided." And since § 207 empowers the FPC to make orders for the improvement of service, the commission took the view that it was authorized to "require that adequate interstate service be rendered." Therefore, the commission said, "this authorizes us to require that electric energy be generated. We may thus exercise regulatory control over generation facilities, however, subject to the limitation in that section that we may not require the enlargement of such facilities." *Re Hartford Electric Light Co. (Docket No. IT-5560).*

Production of Evidence by Employees of Commission

REGULATORY commissions are not courts, but they are sometimes called quasi judicial tribunals. They are administrative bodies, but the courts hold that the essentials of a fair hearing must be observed. These underlying principles frequently precipitate a controversy as to the participation of the commission in a proceeding before it. Such was the case in a recent Wisconsin proceeding to determine the acquisition price to be paid by a city for an electric plant.

The engineering staff of the commission made an inventory and valuation of the property, and commission counsel participated in the introduction of evidence. Objection was made by counsel for the public utility company on the ground that "the commission should be and remain in position so that it can act and decide impartially between the city and the company."

This objection, the commission held, was not properly taken. The statutes direct the commission to determine just compensation to be paid for property acquired by a city, and, said the commission, nowhere do the statutes undertake to direct the commission in the manner of determination of the just compensation. It was said:

If the commission deems it advisable to have its engineering department appraise the property as one of the measures by which it shall determine the just compensation, it surely may make use of its staff facilities for that purpose.

Moreover, it was pointed out that the statute contemplated such use of the engineering staff, as it was provided that expenses incurred by the commission in making any appraisal or investigation should be charged directly to the municipality making the application. The commission concluded:

To contend ... that we cannot put in evidence in the proceeding before us, the facts revealed by our own investigation is tantamount to a contention that we have no right to consider the results of such investigation.

The acquisition price was fixed upon a consideration of all the evidence, including estimates of reproduction cost and of going value. Commissioner Nolan, in a dissenting opinion, criticized accrued depreciation estimates, reproduction cost evidence, and the intangible element of going value. He discussed going value and good will at some length. *City of Edgerton v. Wisconsin Power & Light Co. (2-U-599).*

Restoration of Pavement upon Track Abandonment

An application for approval of the abandonment of street railway service was granted by the Pennsylvania commission subject to the condition that the pavement be restored to a proper condition. It was said:

Applicant proposes to leave the rails and ties located in paved streets in place until public authorities repave the streets, at which time the applicant proposes, at its own cost and expense, to remove its rails and ties and repave the track area. In the absence of any franchise agreement to the contrary, a street railway company is under a common law duty to remove the rails and repave the highway upon abandonment of its tracks. West Penn Railways Co. *v.* Public Utility Commission (Pa Super Ct 1940) 36 PUR (NS) 116, 15 A(2d) 539. Since there is no evidence of any franchise under which applicant operated which relieves it of its common law duty, we shall require applicant to fulfill its obligations by removing the rails and repaving the disturbed area.

Re Philadelphia Transportation Co. (Application Docket No. 59864).

Claimant against Holding Company Not Permitted To Intervene in SEC Proceedings

Applications for intervention in proceedings before the Securities and Exchange Commission relating to property transfers of a holding company system have been denied on the general ground that it is not within the province of the Securities and Exchange Commission to determine the merits of claims enforceable in court.

The Penn-Ken Gas and Oil Corporation and Duke-Whitney Gas and Oil Corporation sought to intervene in such a case because they claimed title to certain lands and properties, title to which was also claimed by Warfield Natural Gas Company, a member of the system. It was alleged that this company was indebted to them in an action for trespass and for the value of gas taken and produced. There is now pending an action filed by these companies claiming damages, and the companies asserted that they possessed or represented a legitimate interest which was or might be inadequately represented in the proceeding before the commission and that their participation would be in the public interest and for the protection of investors.

The applicants stated that their pur-

pose for seeking to intervene was to prevent the dissolution of the Warfield Natural Gas Company and a transfer of its assets pending determination of the action at law. The commission viewed this as an attempt to seek a temporary injunction in aid of their suit. Denial of the application, said the commission, would in no way prejudice or jeopardize their rights in the event that they should be entitled to a remedy either at law or in equity. The commission also said:

> . . . while the litigation now pending before the United States District Court in Kentucky may subsequently be found material in applying the standards of the Holding Company Act of 1935 to the proposed transaction, the commission is fully apprised of the existence of such litigation and no purpose would be served by considering evidence in support of, or in opposition to, the merits of such litigation.

Re Columbia Gas & Electric Corp. et al. (File Nos. 43-272, 46-192, Release No. 2574).

Penalties Not Part of "Excess Sums" to Be Refunded in Rate Case

WHERE a telephone company collected higher rates than those allowed by the commission during litigation to review the rate order, it was not required to refund penalties, under a decree requiring it to refund to subscribers the difference, with interest, between the amounts charged and the amounts allowed by the commission. The Minnesota Supreme Court, in making this ruling, said that under both the old rates and the new rates a discount of 50 cents was allowed for prompt payment. The judgment made no provision for refunding penalties collected. Furthermore, said the court:

> It does not appear that the claim now made was presented to or considered by the trial court in the original proceedings, nor did these appellants in their complaint plead that their failure to pay within the prescribed discount period was occasioned by the fact that they were billed at the old rate, or that they would have paid within the period if they had been billed at the new lower rate. The discount provision was authorized in both the old and the new schedules.
>
> Neither the judgment nor the supplemental decree requires the repayment of these items. It is clear that it was not intended that defendant be required to pay interest on the excess payments and to refund the penalties. The excess has been refunded with interest, and that is all that is required.

Equally untenable, in the opinion of the court, was the argument that subscribers were entitled to offset the overpayments against subsequently accruing telephone bills during the period of litigation. Aside from the impracticability of the plan, there were said to be well-recognized legal principles barring a recovery of the discount items sought. The order and bond staying operation of the new rate schedule required the company to keep intact the amount of the difference between the charge authorized by the old schedule and that authorized by the new one, and provided for a refund with interest. The imposition of the legal rate of interest, it was said, was in lieu of all other damages. At no time until the litigation was terminated did a subscriber have a matured credit against the company which could be used as a set-off. *State v. Tri-State Telephone & Telegraph Co. 295 NW 511.*

Discretionary Power of Commission As to Establishing Municipal Plant

A VILLAGE, under § 196.49(1) of the Wisconsin statutes, must secure a certificate from the commission as a condition precedent to engaging in the busi-

ness of a public water utility. The Wisconsin commission has ruled that the legislature in inserting this provision, by Chapters 183 and 475, Laws of 1931, intended that the commission should exercise its judgment on the question of public convenience and necessity. Otherwise, said the commission, the enactment was without apparent purpose and idle. The commission said in part.

> No specific standard is fixed by § 196.49 (1), Statutes, governing the issuance of such a certificate as is here requested. However, we are of the opinion that it may be reasonably inferred that the legislature intended the commission in granting or refusing such a certificate to exercise its judgment as to whether the proposed construction and operation of a public utility is for the best interests of the municipality and its inhabitants or is required by public convenience and necessity.

Dissenting from the majority view, Commissioner Nixon expressed the opinion that the commission had exceeded its powers in denying a certificate. The village had legal power to transact business as a public water utility under other sections of the Wisconsin statutes. He said that if the statute in question were construed to mean that the commission had been granted legislative power to veto the right of the village to construct such a utility, it was invalid as constituting an unlawful delegation of legislative powers since it failed to provide even the remotest vestige of any such guide or standard by which this far-reaching power could be exercised. He believed that the commission was to exercise only a ministerial function.

The majority of the commission, in denying authority, said that the record was not convincing that public convenience and necessity or the best interests of the village and its inhabitants required such construction. The vote at a referendum, it was said, did not indicate an overwhelming demand for the service, nor had it been shown that the postponement of the installation until the village was in a better financial condition would result in any serious impairment of public health or the public interest. Commissioner Nixon also disagreed on these questions. He said that what the local taxes shall be is purely a matter for the voters to decide. *Re Village of Webster (CA-1568).*

Partnership Agreement Held to Be Device To Evade Jurisdiction

THE owner of a truck used for transportation of miners to and from their homes and a mine was held by the Pennsylvania commission to be operating a motor carrier service unlawfully without a certificate from the commission, notwithstanding the existence of a so-called "partnership agreement" between him and the persons transported.

The commission not only held that this was a device to evade the jurisdiction of the commission, but also pointed out that the law relating to exemption of coöperative associations under the Public Utility Law is limited to associations transporting property and does not extend or apply to transportation of persons. The commission described the operations as follows:

> It was established that such service was being provided for thirty to thirty-three miners each day, and that payment of 10 cents per day was made by each rider. Respondent alleged that all of the passengers were partners with him as owners and operators of the truck. It was further contended that the arrangement between Andy Kovach and his passengers was of a coöperative, nonprofit nature. In support of this contention, respondent introduced a purported agreement of partnership, covering use and operation of the truck. This agreement was signed by Andy Kovach and thirty-one other persons who regularly rode the truck. Six of these signers were called by the commission, for the purpose of inquiring into the real nature of the agreement. Of these, only one testified that he understood, when signing, that he was entering into a partnership agreement. The others expressed their complete ignorance of the contents of the document signed by

them, or stated that they were led to believe that they were signing a waiver of liability, in the event of injury suffered while passengers on the truck. These persons testified that they discontinued riding with respondent when advised of the true nature of the agreement by commission investigators. As these and other persons stopped riding the truck, their places were taken by new riders, to the limit of its capacity.

Public Utility Commission v. Andy Kovach & Co. (Complaint Docket No. 13315).

Other Important Rulings

THE Iowa commission, in denying authority to operate a motor carrier freight service on application by a railroad, ruled that railroads must obtain such certificates before engaging in highway transportation and that authority should be denied where the area is adequately served by an existing carrier. *Re Minneapolis & St. Louis Railroad Co. et al. (Docket No. H-2857).*

The Wisconsin commission, in authorizing discontinuance of local trains, said that the profit or loss on a particular train is not of itself controlling on the question whether public convenience and necessity require maintenance of train service, but that revenues are evidence of such convenience and necessity by indicating the extent to which the public is availing itself of the service. *Re Chicago & North Western Railway Co. (2-R-1183).*

The United States Supreme Court held that due process does not require that the wisdom of the court be substituted for that of an administrative body. This principle was stated in a case relating to a petroleum proration order, in which it was also held that the question whether the order violated a state statute was one for the state courts and not for the Federal courts. *Texas Railroad Commission et al. v. Rowan & Nichols Oil Co.*

The circuit court of appeals, first circuit, in upholding an order of the public service commission of Puerto Rico requiring the construction of a railroad spur, held that the legislature of Puerto Rico could vest powers in the commission additional to those granted by Congress in creating the commission, including the power to regulate the construction of spur tracks. *Guayanilla v. Puerto Rico Public Service Commission et al. 116 F(2d) 15.*

The New York Supreme Court held that a statutory prohibition against service charges for gas did not constitute a prohibition against service charges for electricity even though another section of the statute provided that this article of the statute should apply to gas and electric companies. *Trinchere et al. v. United Electric Light & Power Co. et al. 24 NY Supp(2d) 681.*

The California commission held that the purchaser of a water system operated since prior to the effective date of the Public Utilities Act need not obtain a certificate of convenience and necessity. *Re Associated Water Co. et al. (Decision No. 33818, Application No. 23906).*

The Kansas City Court of Appeals of Missouri held that upon reversal of a judgment setting aside a commission order, the appellants were not entitled to have the cost of printing an abstract containing the brief filed by the respondent with the commission and a reply brief taxed as part of the costs, for the reason that the briefs were no part of the record. *State ex rel. Shepherd et al. v. Public Service Commission et al. 145 SW(2d) 169.*

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports.*

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Public Utilities Reports

COMPRISING THE DECISIONS, ORDERS, AND RECOMMENDATIONS OF COURTS AND COMMISSIONS

VOLUME 37 PUR(NS) NUMBER 2

Points of Special Interest

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TITLES

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Re Engineers Public Service Company et al.

[File No. 70-173, Release No. 2535.]

Intercorporate relations, § 19.8 — Holding companies — Scope of proceedings.

1. It would be inappropriate for the Commission to express any opinion as to whether or not a registered holding company may retain certain subsidiary companies, in a proceeding wherein application and declarations are filed with respect to a series of transactions affecting the financial structure or existence of certain subsidiaries, p. 74.

Consolidation, merger, and sale, § 24.1 — Effect on integration proceedings.

2. Acquisition by a subsidiary company of securities of an associate company, as a donation from the parent of both companies, was approved upon findings that the transaction was preliminary to the acquisition of the utility assets of the associate company; that the two companies were physically interconnected and operated in a single area or region; that the standards of § 10(c) (2) of the Holding Company Act, 15 USCA § 79j (c) (2) had been met; and that the merger itself would not adversely affect any action the Commission might take in an integration proceeding under § 11 (b) (1) of the act, 15 USCA § 79k (b) (1), p. 74.

Intercorporate relations, § 18.1 — Holding companies — Capital contribution — Income notes and stock.

3. No adverse findings, under § 12 of the Holding Company Act, 15 USCA § 79*l* and the rules promulgated thereunder, were made with respect to a capital contribution, by an intermediate holding company, of income notes and of common stock of a subsidiary company, as part of a plan for acquisition of the subsidiary by an affiliate company, p. 74.

Security issues, § 80 — Compliance with Holding Company Act — Refunding — Excess proceeds.

4. The issue and sale of new securities by a subsidiary of a holding company were held to qualify under § 7 of the Holding Company Act, 15 USCA § 79g, where practically all of the new securities would be used solely for the purpose of refunding outstanding securities, so that they would qualify under the provision of Clause (A) of § 7(c) (2) of the Holding Company Act, and some excess would go into the treasury of the company for general corporate purposes, so as to qualify under Clause (B) of § 7(c) (2) of the act as being for the purpose of financing the business of the declarant as a public utility company, p. 75.

Security issues, § 100 — Ratio of debt to net property — Refunding.

5. A declaration filed by a subsidiary public utility company with respect to securities issued for the purpose of refunding outstanding securities was ordered effective as a refunding issue in accordance with previous decisions of the Commission, although the Commission announced the future general policy that a refunding, where the issuer has a high ratio of debt to net property or where the security issue does not fully meet the standards of

§ 7(d) of the Holding Company Act, would not be permitted effectiveness merely because it is a refunding, and that such effectiveness would be permitted only where it appears that the circumstances are so unusual and extraordinary as to justify a departure from the general policy announced, it being the duty of applicants even in such cases to be prepared to have included in refunding operations measures definitely providing for a reduction of the ratio of debt to net property and of debt to total capitalization to a reasonable level, p. 75.

Depreciation, § 39 — Inadequate reserves — Proposals to offset — Security issues.

6. A proposal of an intermediate holding company to contribute properties of a subsidiary to another subsidiary, a proposed adjustment of the depreciation reserves of the subsidiaries in carrying out a consolidation, an increase in annual accruals for depreciation, and a proposed retirement of serial notes of the subsidiary were held somewhat to offset the possible inadequacy of depreciation reserves, so as to avoid an adverse finding under § 7(d) of the Holding Company Act with respect to the issuance of securities, p. 78.

Security issues, § 5 — Reacquisition — Holding Company Act.

7. An application filed by a registered holding company, pursuant to § 12 of the Holding Company Act, relating to the acquisition, for the purpose of retirement, of its preferred stock to a specified amount in its treasury was approved upon a showing that adequate notice of such offer would be mailed to all preferred shareholders of record and upon a representation that the top holding company would tender such shares owned by it at average cost, p. 79.

Security issues, § 100 — Debt ratio — Capitalization and surplus — Plant account.

Discussion of proper ratios of debt to total capitalization and surplus and of bonded debt to depreciated utility plant account in connection with security issues under the standards of § 7(d) of the Holding Company Act, with particular attention to the question whether there should be a differentiation between "refunding" and "new money" financing, p. 75.

Depreciation, § 28 — Retirement method — Abandoned or useless property.

Discussion of the retirement method of providing for the charging off of abandoned, or worn out or useless, property and of depreciation accounting, in relation to adequacy of reserves of subsidiary holding company issuing securities under Holding Company Act, p. 76.

Security issues, § 100 — Debt ratios — Policy of Securities and Exchange Commission.

Statement of policy of Securities and Exchange Commission on refunding issues under § 7 of the Public Utility Holding Company Act, with special reference to the question of debt ratios to depreciated utility plant account and to total capitalization and surplus, when securities are for refunding purposes under § 7(d) of the act, p. 80.

Security issues, § 99 — Capitalization ratios — Tables.

Table furnished by Securities and Exchange Commission showing, as of December 31, 1939, capitalization ratios of various operating utility companies all or part of whose common stocks are publicly owned p. 89.

RE ENGINEERS PUBLIC SERVICE CO.

APPLICATIONS and declarations relating to acquisition of utility assets by a subsidiary of a registered holding company and the issuance of securities; applications granted and declarations permitted to become effective subject to terms and conditions.

APPEARANCES: Harlow B. Lester, Maurice C. Kaplan and Jerome M. Alper, of the Public Utilities Division of the Commission; William E. Tucker, of Mudge, Stern, Williams & Tucker, for the applicants and declarants.

By the COMMISSION: The above-named companies, by applications and declarations filed herein under the Public Utility Holding Company Act of 1935, have proposed a series of transactions affecting the financial structure or existence of certain subsidiaries of Engineers Public Service Company, a registered holding company. Engineers Public Service Company owns, among other things, 70.9 per cent of the voting securities of El Paso Electric Company (a Delaware corporation) which is in turn a registered holding company owning 100 per cent of the common stock and certain notes of three operating subsidiary companies, El Paso Electric Company (a Texas corporation), Mesilla Valley Electric Company (a New Mexico corporation) and El Paso and Juarez Traction Company (a Texas corporation).[1]

El Paso (Texas) and Mesilla are electric utility companies serving a small area bordering on the Rio Grande river, including the city of El Paso, Texas, and extending into New Mexico. El Paso (Texas) is also engaged in the street railway and bus transportation business and owns the American half of two international bridges across the Rio Grande river at El Paso. Juarez owns the Mexican half of said two bridges and traction facilities in the city of Juarez, Mexico. Juarez simply holds title to traction facilities in Juarez, Mexico, and does not conduct any traction operations, such operations being conducted by El Paso (Texas) under contract with Juarez. In the original applications and declarations filed the following transactions were contemplated:

(1) The acquisition of the assets and liabilities of Mesilla by El Paso (Texas) in connection with which outstanding notes of Mesilla were to be canceled by El Paso (Delaware), the owner thereof, and El Paso (Texas) was to pay El Paso (Delaware) $848,691.60 in cash for the common stock of Mesilla. Thereafter Mesilla was to be dissolved and completely liquidated.

(2) The issuance by El Paso (Texas) of $6,500,000 of its first mortgage bonds, series A, $3\frac{1}{4}$ per cent, due 1970; 24,000 shares of $5 preferred stock; and $1,000,000 principal amount of serial notes, $2\frac{1}{4}$–$2\frac{3}{8}$ per cent, and the redemption of its outstanding 5 per cent bonds and $6 preferred stock.

[1] Hereafter in this opinion, the statute in question will be referred to as the "Holding Company Act" or the "Act," the top holding company as "Engineers," the intermediate holding company as "El Paso (Delaware)," and its three subsidiaries as "El Paso (Texas)," "Mesilla" and "Juarez," respectively.

(3) The dissolution of El Paso (Delaware), the redemption of its preferred stock at $100 per share, and the distribution of its remaining assets, including 100 per cent of common stocks of El Paso (Texas) and Juarez, to its common shareholders of which Engineers Public Service Company is the principal one.

After appropriate notice a hearing for the taking of evidence was ordered by the Commission and held before a trial examiner. Thereafter briefs were exchanged and filed and oral argument was heard before the Commission itself. At this argument counsel for the Public Utilities Division made objection to certain aspects of the transactions.

On December 20, 1940, while the matter was under advisement, the applicants and declarants filed Amendment No. 9 in which they made substantial changes in the proposals. Amendment No. 10 was filed on December 27, 1940. The proposals comprising the amended plan may be summarized as follows:

(1) El Paso (Delaware) will donate the common stock of Mesilla to El Paso (Texas), instead of receiving $848,691.60 in cash therefor.

(2) After the merger of Mesilla into El Paso (Texas) the latter company will issue $6,500,000 aggregate principal amount of its first mortgage bonds, series A, 3¼ per cent, due November 1, 1970; a 2–2¼ per cent 7-year $1,000,000 note payable serially; and 15,000 shares of $4.50 dividend preferred stock—no par. El Paso (Texas) will call for redemption its $8,000,000 outstanding 5 per cent bonds and the outstanding 7,785 shares of $6 preferred stock.

(3) El Paso (Delaware) will not be liquidated but will call for tenders of its series A, 7 per cent preferred stock and its series B, 6 per cent preferred stock, which it will accept to the extent that purchases can be made out of $1,150,000 now in its treasury.[2]

It is noted that the principal changes proposed in the revised plan are the donation of the Mesilla stock by El Paso (Delaware), rather than the purchase by El Paso (Texas) of said stock for $848,691.60 cash provided through the sale of additional preferred stock, the elimination of the former proposal to dissolve El Paso (Delaware), and a reduction of the amount of preferred stock to be issued and the dividend rate thereon.

We have reëxamined and reconsidered the whole record in this case with particular reference to Amendments No. 9 and No. 10 and are of the opinion that the applications should be granted and the declarations should be permitted to become effective.

Amended Plan of Action

A. *Acquisition of Mesilla by El Paso (Texas)*

The outstanding securities of Mesilla, all of which are owned by El Paso (Delaware) consist of $795,000 principal amount of income notes and 3,000 shares of common capital stock without par value. Under the proposal as amended, the acquisition by El Paso (Texas) of the interest of El Paso (Delaware) in Mesilla involves

[2] Engineers will tender its series A stock at $114.10, stated to be the average cost per share to it.

the following steps: (a) that El Paso (Delaware) shall surrender to Mesilla all but $8,000 principal amount of income notes for cancellation as a contribution to Mesilla's capital; (b) that El Paso (Delaware) shall transfer to El Paso (Texas) as a contribution to the latter company's capital the 3,000 shares of capital stock of Mesilla; (c) that El Paso (Texas) shall vote such stock so as to authorize the liquidation and dissolution of Mesilla; (d) as a first step in liquidation Mesilla shall pay off in cash the remaining $8,000 principal amount of income notes; and (e) as a final step in liquidation Mesilla shall transfer all of its remaining property and assets to El Paso (Texas) against surrender of 3,000 shares of capital stock and in consideration of an agreement on the part of El Paso (Texas) to assume all of Mesilla's remaining liabilities, amounting to $44,847, and expenses of liquidation, estimated to be in a nominal amount.

B. *Refinancing of El Paso (Texas)*

The presently outstanding securities of El Paso (Texas) consist of $8,000,000 principal amount of 5 per cent first mortgage bonds due 1950, callable at 102 and accrued interest, all of which are publicly held; 7,785 shares of $6 dividend nonvoting preferred stock without par value, callable at 110 and accrued dividends, nearly all of which are publicly held; 150,000 shares of common stock without par value, all of which are held by El Paso (Delaware).

It is proposed that the outstanding bonds and preferred stock be redeemed and that the company issue and sell $6,500,000 principal amount of first mortgage bonds, series A, 3¼ per cent, due 1970; a 2–2¼ per cent serial note in the principal amount of $1,000,000, maturing semiannually over the period of 1941–1947, and 15,000 shares of $4.50 dividend series preferred stock.

The new bonds and preferred stock will be sold to the public through underwriters, under an underwriting contract between El Paso (Texas) and a syndicate headed by Stone & Webster and Blodget, Inc. The price of the new bonds will be 106 to the public and 104¼ to the syndicate; that of the new preferred stock will be 105 to the public and 102¼ to the syndicate. The serial note will be sold privately to a corporation, named "The President and Directors of the Manhattan Company" at its face value.

The bonds of series A are to be secured by an indenture of mortgage as of November 1, 1940, entered into between El Paso (Texas) and State Street Trust Company and Dana M. Dutch as trustees. By the terms of the mortgage the bonds may be redeemed as follows: 109 per cent to and including October 31, 1944; 108 per cent on November 1, 1944, and thereafter to and including October 31, 1948; 107 per cent on November 1, 1948, and thereafter to and including October 31, 1952; 106 per cent on November 1, 1952, and thereafter to and including October 31, 1955; 105 per cent on November 1, 1955, and thereafter to and including October 31, 1958; 104 per cent on November 1, 1958, and thereafter to and including October 31, 1961; 103 per cent on November 1, 1961, and thereafter to and including October 31, 1964; 102 per cent on November 1, 1964, and

thereafter to and including October 31, 1966; 101 per cent on November 1, 1966, and thereafter to and including October 31, 1968; 100½ per cent on November 1, 1968, and thereafter to and including October 31, 1969; 100 per cent on November 1, 1969, and thereafter to maturity.

A sinking fund is also provided for to the extent that the company will deposit semiannually on June 1st and December 1st of each year beginning June 1, 1948, an amount in cash equal to ¾ of 1 per cent of the total principal amount of the then outstanding bonds of series A. By the terms of the mortgage El Paso (Texas) covenants that it will annually expend for maintenance and accrue to depreciation reserves not less than 15 per cent of gross revenues. Also it is provided that any amounts allocated therefor but not actually used for maintenance and replacements shall be deposited with the trustee, and that no additional bonds may be issued against depreciation moneys or against new property constructed or purchased with depreciation moneys.

The charter of El Paso (Texas) will be amended so as to give the preferred stock the following rights:

(1) The preferred stock does not carry the right to vote except in event of default in the payment of dividends on such stock. In the event that accrued but unpaid dividends equal four full quarterly dividends, the preferred shareholders voting as a class shall be entitled to elect two directors. In the event accrued but unpaid dividends equal twelve full quarterly dividends, the preferred stock voting as a class shall be entitled to elect a majority of the members of the board of directors. The right of the preferred stock to vote in each of the above situations shall continue until all dividends in default on the preferred stock shall have been paid. The preferred stock is redeemable at $109 per share and accrued dividends. The preferred stock provisions of the charter also contain other protective features, such as voting power in the event of a merger and limitations on the creation of unsecured indebtedness.

(2) With the exception of dividends payable in common stock and retirements of such stock effected out of the proceeds of junior stock financing, no dividend or other payments to holders of common stock can be made except out of net income (as defined in the charter) accumulated subsequent to December 31, 1939, after further deductions from net income at the rate of $140,000 annually (being the amount of the annual maturities on the bank loan) beginning in 1941 until such deductions shall aggregate $1,000,000.

(3) The following corporate action cannot be taken if less than a majority of outstanding shares of preferred stock is voted affirmatively or one-third or more of such shares is voted negatively:

(a) creation, authorization, or issuance of any class of stock having priority over the preferred stock as to dividends or assets, or of any class of securities convertible into stock having such priority;

(b) any change in the provisions of the charter relating to the preferred stock or of any series thereof which would prejudicially change the terms

and provisions of such stock (but if less than all series are affected, then only the affected series can vote); and

(c) creation, authorization, or issuance of additional shares of any series of preferred stock, or of any stock on a parity with the preferred stock (herein called parity stock) if, after issuance thereof, (i) capital represented by junior stock (plus surplus to the extent that distribution thereof to holders of junior stock is prohibited while additional shares are outstanding) will be less than the involuntary liquidation price of all preferred stock outstanding and all parity stock, and (ii) during a period of twelve consecutive months within the immediately preceding fifteen calendar months, net earnings of the company available for dividends are less than 2½ times the annual dividend requirements on all preferred stock and all parity stock and prior stock and the balance of earnings of the company available (after taxes and depreciation) for interest, amortization, and dividends is less than 1½ times the total of annual interest requirements and annual dividend requirements on all preferred stock and all parity stock and prior stock.

(4) The following corporate action is prohibited unless authorized by a plurality vote of a majority of holders of preferred stock:

(a) issuance or assumption of unsecured securities, except to refund outstanding debt securities or redeem or retire preferred stock, if after such issuance or assumption the unsecured securities issued or assumed will exceed 10 per cent of the total of the company's secured debt and its capital and surplus (but any securities specifically approved by vote of the preferred stock are not to be considered in determining whether the above limitation has been or will be exceeded); and

(b) the statutory merger or consolidation of the company with or into any other corporation or a sale of all or substantially all of the assets of the company, unless the merger, consolidation, or sale, or the issuance or assumption of all securities to be issued or assumed in connection therewith, has been ordered, approved, or permitted by the Securities and Exchange Commission under the Public Utility Holding Company Act of 1935, or successor authority, after specific application or other formal presentation.

With respect to the serial note, it is provided that it shall be payable $70,000 on each June 1st and December 1st of each calendar year from 1941 to 1946 and June 1, 1947, and $90,000 on November 1, 1947. The indenture provides that, so long as any of the bonds of series A remain outstanding, El Paso (Texas) will not (a) declare or pay any dividend or make any other distribution to the holders of its common stock (other than a dividend payable in common stock of the company) or (b) purchase or acquire or otherwise retire for a consideration (otherwise than from the proceeds of new stock financing) any share of its capital stock of any class, if (i) the aggregate amount so paid after December 31, 1939, plus (ii) the principal amount theretofore maturing in accordance with the terms of the serial bank note of the company being issued at this time would exceed in the aggregate the aggregate of the net income of the company available for

dividends on its common stock accumulated after December 31, 1939.

The following tabulation shows the ratios, actual and pro forma, of the various classes of securities to total capitalization (including surplus) as of August 31, 1940 (except as otherwise noted):

EL PASO ELECTRIC COMPANY (TEXAS)

Capitalization and Surplus

	Actual [1]	Per Cent of Total	Pro Forma [2]	Per Cent of Total
Bonds	$8,000,000	62.4	$6,500,000	46.8
Serial notes	.....	...	1,000,000	7.2
Total funded debt	$8,000,000	62.4	$7,500,000	54.0
Preferred stock	$768,704	6.0	$1,500,000	10.8
Common stock	3,000,000	23.4	3,848,692[3]	27.8
Premium on preferred stock	.....	...	33,750	0.2
Surplus	1,050,610	8.2	997,207	7.2
Total capitalization	$12,819,314	100.0	$13,879,649	100.0

[1] Per books as of August 31, 1940, before proposed financing.

[2] Per books as of August 31, 1940, adjusted to reflect (a) merger of Mesilla, (b) results of proposed financing, (c) results of normal operations for period August 31, 1940, to December 1, 1940, and (d) estimated payment of interest and dividends in December of 1940 and January of 1941.

[3] The $848,692 contributed capital was first put into capital surplus on the company's books and then immediately transferred to capital account.

The $8,000,000 principal amount of bonds presently outstanding amount to 67.6 per cent of the net plant account per books as at August 31, 1940, whereas the $7,500,000 principal amount of bonds and notes to be issued will amount to 59.4 per cent of the net plant on a pro forma basis. The following table indicates the security structure of El Paso (Texas) in relation to the net plant plus net current assets (per books):

	Actual		Pro Forma	
Net plant	$11,828,612		$12,614,378	
Net current assets	714,218		1,130,011	
Total of above	$12,542,830		$13,744,389	
	Amount	Per Cent of Net Plant and Net Current Assets	Amount	Per Cent of Net Plant and Net Current Assets
Bonds	$8,000,000	63.8	$6,500,000	47.3
Serial notes	.....	...	1,000,000	7.3
Total funded debt	$8,000,000	63.8	$7,500,000	54.6
Preferred stock	$768,704	6.1	$1,500,000	10.9
Balance for common stock	3,774,126	30.1	4,744,389	34.5
Total	$12,542,830	100.0	$13,744,389	100.0

A statement follows showing actual gross income, fixed charges and preferred dividend requirements of El Paso (Texas) alone for the twelve months ending August 31, 1940, before the proposed financing, as compared with the pro forma gross income of El Paso (Texas) (including Mesilla), for the same period, and fixed charges and preferred dividend requirements after the proposed financing:

EL PASO ELECTRIC COMPANY (TEXAS)

Actual and Pro Forma Income Statement for the Twelve Months Ended August 31, 1940

	Actual	Pro Forma
Operating Revenue	$3,064,541	$3,275,140
Operating Expenses:		
Expenses	$1,226,373	$1,302,635
Maintenance	170,695	178,092
Depreciation	370,048	400,936
Taxes	418,830	498,368
Total	$2,185,946	$2,380,031
Net Operating Income	$878,595	$895,109
Nonoperating income (Net)	16,226	22,628
Gross income	$894,821	$917,737
Fixed Charges:		
Bond interest	$400,000	$211,250
Other interest	12,222	26,267
Amortization of debt discount and expense	37,199	74,297
Total Fixed Charges	$449,421	$311,814
Net Income	$445,400	$605,923
Preferred share dividend requirements	46,710	67,500
Balance of Net Income Available for Common Stock	$398,690	$538,423
Ratio of gross income to:		
Interest on first mortgage bonds	2.24	4.34
Total interest requirement	2.17	3.86
Total fixed charges	1.99	2.94
Total fixed charges and preferred share dividend requirements	1.80	2.42
Ratio of net income to preferred share dividend requirements	9.54	8.98

C. *Call for Tenders of Outstanding Preferred Stock of El Paso (Delaware)*

The outstanding securities of El Paso (Delaware) consist of the preferred and common stocks held as shown below: [At bottom of page.]

El Paso (Delaware) proposes to call for tenders on both its 7 per cent and 6 per cent preferred stock, said tenders not to exceed the respective redemption prices ($115 and $110). Tenders at the lowest price will be accepted first taking into consideration the difference in yield on the two classes of preferred stock. El Paso (Delaware) will expend funds from its treasury in the amount of $1,150,000 for the purpose of purchasing such shares.

Engineers Public Service Company will tender 3,377 shares of 7 per cent preferred stock of El Paso (Delaware), acceptable in whole or in part, at the average cost thereof to Engineers stated to be $114.10 per share.

If tenders in the amount sufficient to exhaust $1,150,000 are not received, El Paso (Delaware) proposes

	Total Amount Outstanding	Owned by Public	Engineers
Preferred stock, 7 per cent, series A, $100 par	25,988 shs.	22,611 shs.	3,377 shs.
Preferred stock, 6 per cent, series B, $100 par	176 shs.	176 shs.	None
Common stock, no par	58,282 shs.	1,788 shs.	56,494 shs.

to purchase from time to time on the open market at current prices, but not in excess of the redemption price of each series, additional shares of preferred stock sufficient to exhaust that sum.

Findings and Conclusions

A. *Acquisition of Mesilla by El Paso (Texas)*

[1–3] One of the principal questions presented by the proposals of applicants and declarants arises in respect to the acquisition of Mesilla's securities and assets by El Paso (Texas), and arises under § 10(c) of the Act, 15 USCA § 79 j(c). Under this section we may not approve such acquisition (1) if it is "unlawful under the provisions of § 8 or detrimental to the carrying out of the provisions of § 11" or (2) unless we find that "such acquisition will serve the public interest by tending towards the economical and efficient development of an integrated public utility system." As to the provisions of § 8, 15 USCA § 79h, it appears from the opinions of counsel filed herein that no state laws prohibit such transactions. Further, no state Commission has informed us that such laws have not been complied with.

With respect to the provisions of § 11, 15 USCA § 79 k and the tendency referred to above, we note that the two systems of El Paso and Mesilla are contiguous and are in fact interconnected. Most of the power transmitted and distributed by Mesilla is purchased from El Paso (Texas). The electric properties of both companies operate in parallel. No other electric utility company operates in the same or adjacent territory. The operations of the companies are confined to a single area about 165 miles in length extending northerly to Arrey, New Mexico, and southeasterly to McNary, Texas, along the Rio Grande river. It is estimated that the administrative expenses will be reduced by approximately $9,000 per year as a result of the elimination of Mesilla as a separate corporate entity. This is aside from the savings resulting from the proposed financing. However, it should be noted that Mesilla has an isolated station at Hillsboro, New Mexico, while El Paso (Texas) has similarly isolated stations at Sierra Blanca and Van Horn, Texas. Officers of the company testified that there was no intention of tying in these isolated properties with the main system.

There is now pending a proceeding pursuant to § 11(b)(1) of the Act, *supra,* against Engineers Public Service Company and all of its subsidiaries, including Mesilla, El Paso (Delaware), El Paso (Texas), and Juarez. It would be inappropriate for us at this time to express any opinion as to whether or not Engineers Public Service Company may retain El Paso (Delaware), Mesilla, El Paso (Texas), and Juarez. However, the merger of Mesilla and El Paso (Texas) will not of itself adversely affect any action we may take in the § 11(b)(1) proceeding. Accordingly, we do not find that the action in question will be detrimental to the carrying out of the provisions of § 11; and in view of the foregoing, we find that the acquisition of Mesilla's securities and assets by El Paso (Texas) will of itself serve the public interest by tending toward the economical and efficient de-

velopment of an integrated public utility system.

With respect to the capital contribution of income notes of Mesilla and of Mesilla's common stock, we make no adverse findings under § 12, 15 USCA § 79*l* and the rules promulgated thereunder.

B. *Refinancing of El Paso (Texas)*

[4, 5] Inasmuch as the issue and sale of new securities by El Paso (Texas) are governed by § 7, 15 USCA § 79g, it is necessary to determine whether the new securities comply with the requirements of that section. Practically all of the proceeds of the new securities will be used solely for the purpose of refunding outstanding securities of El Paso (Texas) so that they are qualified under the provision of Clause (A) of § 7 (c) (2), *supra.* In so far as there may be some excess which will go into the treasury of El Paso (Texas) for general corporate purposes, such excess qualifies under Clause (B) of § 7(c) (2) as being for the purpose of financing the business of the declarant as a public utility company.

We are advised by a written opinion of counsel that no state Commission has jurisdiction over the contemplated financing. Moreover, no state Commission or state securities Commission has advised us that state laws have not been complied with; we, therefore, find that the provisions of § 7(g) of the Act are met.

We are, therefore, confronted with the question of whether or not we should make adverse findings with respect to the matters specified in § 7 (d).[3]

Although we make no adverse findings under § 7(d), we have had some concern in regard to three questions.

1. We believe that the pro forma ratios of debt to total capitalization and surplus and of bonded debt to depreciated utility plant account are not ideal. In urging disapproval of the program originally presented, counsel for the Public Utilities Division of the Commission argued that there was no valid statutory basis for the differentiation between "refunding" and "new money" financing made by the Commission in earlier opinions and that consequently the Commission should not relax the standards of § 7(d) in favor of refundings. Since the declarant may not inappropriately have relied upon our earlier opinions in formulating the refinancing program presented to us at a time when the staff had not

[3] Section 7(d) reads as follows:

"(d) If the requirements of subsections (c) and (g) are satisfied, the Commission shall permit a declaration regarding the issue or sale of a security to become effective unless the Commission finds that—

"(1) the security is not reasonably adapted to the security structure of the declarant and other companies in the same holding company system;

"(2) the security is not reasonably adapted to the earning power of the declarant;

"(3) financing by the issue and sale of the particular security is not necessary or appropriate to the economical and efficient operation of a business in which the applicant lawfully is engaged or has an interest;

"(4) the fees, Commissions, or other remuneration, to whomsoever paid, directly or indirectly, in connection with the issue, sale, or distribution of the security are not reasonable;

"(5) in the case of a security that is a guaranty of, or assumption of liability on, a security of another company, the circumstances are such as to constitute the making of such guaranty or the assumption of such liability an improper risk for the declarant; or

"(6) the terms and conditions of the issue or sale of the security are detrimental to the public interest or the interest of investors or consumers."

as yet publicly expressed such views, we shall not here undertake to decide that question.[4] However, in order that future applicants presenting declarations for refunding of outstanding senior securities may be fully forewarned of the problem and be prepared to meet it we take this occasion to announce our future general policy as follows:[5] (A refunding of outstanding senior securities, where the issuer has a high ratio of debt to net property or where the security issue does not fully meet the standards of § 7(d), will not be permitted effectiveness merely because it is a refunding. Such effectiveness will be permitted only where it appears that the circumstances are so unusual and extraordinary as to justify a departure from the general policy announced. Even in such cases the applicants should also be prepared to have included in their refunding operations measures definitely providing for a reduction of the ratio of debt to net property and of debt to total capitalization to a reasonable level.)

We are attaching to this opinion an appendix in which we set forth at greater length our position in this regard.

2. Prior to the calendar year 1939, both Mesilla and El Paso (Texas) followed the retirement method of providing for the charging off of abandoned or worn-out or useless proper-

[4] We consider it preferable in the interest of justice and fair play not to overrule these precedents retrospectively. In so doing, we do not in any way concede that we are precluded from giving retrospective effect to an overruling decision so far as pending matters are concerned, should the public interest or the interest of investors or consumers require it. Our policy in this regard has been correctly stated in *Monograph No. 26 of the Attorney General's Committee on Administrative Procedure*, pages 265–267: "The Commission has been keenly aware of the precedent power of its decisions, and has utilized and consistently sought to apply the doctrine of stare decisis. Nevertheless, the Commission has occasionally, and properly reversed itself," citing Chairman Frank's address to the Association of the Bar of the city of New York, May 5, 1939. "And, it is to be noted, where the Commission in fact overrules prior decisions, it usually gives ample warning," citing Re Virginia Pub. Service Co. (1939) 6 SEC 419.

Mr. Justice Frankfurter, speaking for a majority of the United States Supreme Court, recently said: "We recognize that stare decisis embodies an important social policy. It represents an element of continuity in law, and is rooted in the psychologic need to satisfy reasonable expectations. But stare decisis is a principle of policy and not a mechanical formula of adherence to the latest decision. . . . This Court . . . has from the beginning rejected a doctrine of disability at self-correction. . . . We cannot evade our own responsibility for reconsidering, in the light of further experience, the validity of distinctions which this Court has itself created. . . . Surely we are not bound by reason or by the considerations which underlie stare decisis to persevere in distinctions taken in the application of a statute which, on further examination, appear consonant neither with the purposes of the statute nor with this Court's own conception of it." Helvering v. Hallock (1940) 309 US 106, 119, 84 L ed 604, 60 S Ct 444, 125 ALR 1368. The United States Supreme Court has frequently refused to be bound by stare decisis. See e. g. Graves v. New York ex rel. O'Keefe (1939) 306 US 466, 83 L ed 927, 59 S Ct 595, 120 ALR 1466; Erie R. Co. v. Tompkins (1938) 304 US 64, 82 L ed 1188, 58 S Ct 817, 114 ALR 1487; cases collected by Brandeis, J., dissenting in Burnet v. Coronado Oil & Gas Co. (1932) 285 US 393, 405, 407, 76 L ed 815, 52 S Ct 443. It is at best doubtful whether the rule of stare decisis has more than a limited application in the field of administrative law. See Note (1939) 16 NYULQ 618.

[5] Under the circumstances we suggest it is appropriate to apply those considerations "of convenience, of utility, and of the deepest sentiments of justice" which the late Mr. Justice Cardozo regarded as the guiding factors for prospective overrulings in the courts. See Cardozo, The Nature of the Judicial Process (1932) 146–149. Cf. Wigmore, "The Judicial Function," The Modern Legal Philosophy Series IX—Science of Legal Method (1917) pp. xxxvii and xxxviii; Great Northern R. Co. v. Sunburst Oil & Refining Co. (1932) 287 US 358, 365, 366, 77 L ed 360, 53 S Ct 145, 85 ALR 254; People v. Maughs (1906) 149 Cal 253, 86 Pac 187; People v. Ryan (1907) 152 Cal 364, 92 Pac 853.

ties. This method was approved by many state regulatory Commissions until 1935 and by the Uniform Classification of Accounts recommended by the National Association of Railroad and Utilities Commissioners in 1922. The classification approved by that association in 1922 recommended as follows:

"251. *Retirement Reserve.*

"To this account shall be credited such amounts as are charged to operating expense account 'Retirement Expense,' appropriated from surplus, or both, to cover the retirement loss represented by the excess of the original cost, plus cost of dismantling, over the salvage value of fixed capital retired from service. When any fixed capital is retired from service, the original cost thereof (estimated if not known, and where estimated, the facts on which the estimate is based should be stated in the entry) should be credited to the proper fixed capital account and charged, plus the cost of retirement, less salvage, to this account. If the credit balance in this account is insufficient to cover the retirement loss, the excess over the balance contained in the reserve should be charged to account No. 132, 'Property Abandoned,' . . . or other appropriate account.

"The loss which this account is intended to cover are those incident to important retirements of buildings, of large sections of continuous structures, like electric line, or of definitely identifiable units of plant or equipment, and the purpose of the account is that the burden of such losses may be as nearly as is practicable equalized from year to year, but with due regard for amount of earnings available for this purpose in each year.

"Note A—When property is retired whose ledger value has been below original cost, only the remaining ledger value shall be written off as retirement loss.

"Note B—When any property is retired whose ledger is greater than the known or estimated cost, such excess shall be charged to profit and loss.

"Note C—If any property is sold for more than its original cost, the excess of its selling price over the cost of the property plus the cost of dismantling and selling, shall be credited to this account.

"Note D—If the accounting company has, previous to the effective date of this uniform classification of accounts, maintained a reserve under some other title, such as "Depreciation Reserve," for the purpose of equalizing retirement losses, the balance in such reserve, as at the effective date of this classification, shall be transferred to this account."

Depreciation is now the subject of an extensive study being conducted by a committee of the National Association of Railroad and Utilities Commissioners, which is receiving the coöperation of the Bureau of Internal Revenue, the Federal Power Commission, the Interstate Commerce Commission, the utility companies, and this Commission.

Prior to January 1, 1939, a study was made by the management with a view to ascertaining the future annual accruals for depreciation. These figures were based on a composite life of depreciable property of 29.8 years in the case of El Paso (Texas), and a somewhat shorter life in the case of

Mesilla. They were also based on the assumption of a rate of growth of 7.6 per cent per year over the entire composite life cycle, although during the past ten years the rate of growth has been about 2 per cent.

As a result of this study it was proposed that commencing January 1, 1939, and thereafter, annual accruals for depreciation reserve should be 2½ per cent of electrical plant in the case of El Paso (Texas) and 3½ per cent in the case of Mesilla. It was admitted by an officer of the companies in his testimony that if the present average rate of growth should decrease accruals to depreciation would have to be increased.

The same witness stated that if the companies carried back the new formula over a period of twenty or twenty-five years or over the entire composite service life of 29.8 years, the depreciation reserve would be about 22 per cent of depreciable property, or 20 per cent of total property in the case of El Paso (Texas). In the case of Mesilla the witness expressed the opinion that upon the same assumption the depreciation reserve for that company would be 14 or 15 per cent.

Both El Paso (Texas) and Mesilla have claimed more for depreciation for Federal income tax purposes than they have accrued to their retirement and depreciation reserves.

As of August 31, 1940, depreciation reserve of Mesilla amounted to $109,376 or 10.53 per cent of its total property. Prior to its acquisition, Mesilla proposes to transfer its earned surplus in the amount of $55,234 to depreciation reserve, increasing the latter to $164,610 or 15.83 per cent of its total property.

As of August 31, 1940, El Paso (Texas) depreciation reserve amounted to $1,258,992 or 9.62 per cent of its total property. On a pro forma basis the aggregate depreciation reserves of El Paso (Texas) and of Mesilla after the above adjustment will amount to $1,423,602 or 10.08 per cent of total property. This is to be adjusted, however, by transferring El Paso (Texas) electric plant adjustment account in the amount of $88,308 to the depreciation reserve, resulting in a pro forma depreciation reserve in the amount of $1,511,910 or 10.70 per cent of the total property.

[6] The argument of counsel for the Public Utilities Division that the depreciation reserve may be inadequate and that, for the purpose of considering the proposed securities under § 7(d), we should ascertain the adequacy of the reserve and compute the pro forma capitalization and net property ratios accordingly is impressive. We believe, however, that the proposal of El Paso (Delaware) to contribute the Mesilla properties to El Paso (Texas), the proposed adjustment of the depreciation reserves of El Paso (Texas) and Mesilla in carrying out the consolidation, the increase which the company has been making since January, 1939, in annual accruals for depreciation, and the proposed retirement of the serial notes of El Paso (Texas) somewhat tend to offset the possible inadequacy of the reserve. Whereas an adjustment for inadequate depreciation reserve would worsen the capitalization and property ratios, the above proposals of the companies tend to improve them. In addition, we rec-

ognize that heretofore the argument on depreciation had not been sharply presented. In view of these circumstances, we do not make an adverse finding in this regard under § 7(d). However, companies in the future should be prepared to present their cases having in mind that the question of adequacy of the depreciation reserve may be raised and decided.[6]

In concluding not to make an adverse finding under § 7(d) in this case, we are influenced by the fact that the intermediate holding company will increase its equity investment in El Paso (Texas) through contribution of the property now owned by Mesilla.

3. As has been heretofore pointed out, El Paso (Texas) owns rights-of-way, franchises, tracks, a car barn and garage, street cars, and busses in the city of El Paso, Texas. Its sister company, Juarez, owns tracks, rights-of-way and franchises in the city of Juarez, Mexico, but it does not itself conduct any operations. Under contract between the two companies El Paso (Texas) conducts the actual operations, including the furnishing of street cars.

Without setting out all of the facts in the record pertaining to this matter, we state our conclusion that the costs of operating the Texas company are inequitably allocated as between utility plant and transportation property with the result that the electrical consumers are in effect subsidizing the transportation activities. Substantially the same question may be raised as to the joint operations with Juarez properties. Officers of the companies have agreed to adjust these matters. Our order herein will contain a condition (which, however, will not be a condition precedent to the other transactions involved herein) to the effect that within ninety days from the date hereof El Paso (Texas) and Juarez shall submit to this Commission a plan for fair and equitable allocation of costs as to these matters.

C. *The Call for Tenders by El Paso (Delaware)*

[7] We have examined the proposed method of calling for tenders together with the letters and other documents to be sent to holders of the $7 and $6 preferred stocks of El Paso (Delaware) and we make no adverse findings with respect to them under § 12(c) of the Act, 15 USCA § 79*l* (c).

D. *Continued Applicability of Section 11(b)*

Nothing herein contained shall be construed to impair our powers and duties under § 11(b) of the Act, 15 USCA § 79k(b) with respect to Engineers Public Service Company and its subsidiaries, El Paso (Delaware), El Paso (Texas) and Juarez.

Conclusion

In the light of all the foregoing findings and conclusions in connection with the various applications and declarations filed pursuant to §§ 7, 10, and 12 of the Act and applicable rules promulgated thereunder, we are of the opinion that the said applications

[6] Our judgment of the adequacy of the depreciation reserve for the purpose of determining whether the requirements of § 7(d) have been met would not mean, of course, that the reserve must be correspondingly adjusted on the company's books or that it would be controlling or would necessarily have any effect in rate determinations. This Commission has no power to determine rates.

should be granted and said declarations permitted to become effective forthwith, subject, however, to the following terms and conditions:

1. That the transactions herein shall be carried out in the manner and upon the terms prescribed by said applications and declarations as amended.

2. That within ten days after the consummation of the various transactions, applicants and declarants file a certificate of notification.

3. That when all expenses incurred in connection with the issue and sale of the securities and the preparation and prosecution of the applications concerned with the present transactions shall be actually paid, the applicants and declarants shall file a detailed statement of such expenses showing the names of persons or entities to whom such payments were made, the amounts of such payments, the accounts charged, and a detailed description of the services rendered for which such payments were made.

4. That within ninety days from the date hereof, El Paso (Texas) and Juarez shall submit to this Commission a plan of fair and equitable reallocation of costs as between the transportation operations and electrical operations of said companies, the Commission reserving jurisdiction to review said plan. This condition shall not be considered a condition precedent to the consummation of the other transactions.

By the Commission. (Chairman Frank and Commissioners Healy, Eicher, Henderson, and Pike.)

Appendix

Policy of the Commission on Refunding Issues under § 7 of the Public Utility Holding Company Act

As has been stated in our opinion in Re El Paso Electric Co. File No. 70–173, the Commission in permitting the declarations under § 7 of the Holding Company Act to become effective has given some weight to the fact that they are refunding issues, despite the fact that the pro forma ratios of long-term debt (a) to the depreciated utility plant account and (b) to total capitalization and surplus, are not conservative.[1] Several opinions of the Commission and of

[1] We recognize the difficulties of defining an ideal capital structure for a utility. The following, however, are some opinions by experts on what they consider to be ideal ratios of (1) debt to total capitalization, (2) funded debt to properly depreciated property account, and (3) debt and preferred stock to net assets of a utility. Of course the Commission does not necessarily concur in these opinions.

(1) Ratio of debt to total capitalization: John W. Stedman, vice president of the Prudential Life Insurance Company, in testifying before the T.N.E.C. in 1940 set forth a 45 per cent ratio. 12 T.N.E.C. Verbatim Record 125 (February 27, 1940). An examination of the capital structures of 34 of the largest private electric utilities in England revealed that the average ratio of debt to total capitalization was only 29 per cent. Fergus J. McDiarmid, How the British Finance Their Public Utilities (1939) 24 Public Utilities Fortnightly, 675, 676. In discussing railroad finance, William Z. Ripley stated that "the principle seems well established that the bonds of a railroad ought not normally to exceed 40 per cent of its entire capitalization." Ripley, Railroads (1920) 120.

(2) Ratio of funded debt to properly depreciated property account: A. M. Massie, vice president of the New York Trust Company, said on April 18, 1940, that "from a study of many companies, if, on the basis of present book values, the debt exceeds 50 per cent of the present book values, I would not consider it a very conservative capitalization. . . . I would take the position that a debt structure equal to 50 per cent of the original cost value would be high enough. Preferably, I would rather see a debt structure not exceeding 35 to 40 per cent of original cost values." 21 Savings Bank Journal (May, 1940) 34. Webb Wilson of Smith Barney & Co. concurred in the latter statement. *Ibid.* Commissioner Healy stated in his paper on "Fi-

individual Commissioners have in the past stated that our policy was to apply the standards of § 7(d) less strictly to refunding issues than to issues for new money.[2] While such statements have been largely predicated on special circumstances appearing in the cases wherein the statements were made,[3] it is apparent that reliance has been placed upon them as authority for the general proposition stated. In view of these precedents we think it desirable to explain at greater length the reasons for the policy announced in our opinion.

Any general policy of differentiating between refunding and new money issues, in the application of the standards of § 7(d), appears to us to be particularly vulnerable because the Holding Company Act does not provide for such differentiation in treatment, and because there are several practical administrative considerations which seem to require that refunding issues should measure up to as strict standards as issues for new money.

As to the first, some confusion of thought has arisen out of the terms of § 7(c) which provides that we may not permit a declaration to become effective unless it is in respect of a security meeting one or more of the tests set up in clauses (1), (2), or (3) of such section. Clause (2) (A) thereof in effect sanctions any security which is to be issued or sold solely "for the purpose of refunding, extending, exchanging, or discharging an outstanding security of the declarant. . . ." But the general tests of § 7 (c) are, of course, merely a preliminary hurdle to be overcome before any of the more specific tests of § 7 (d) can be applied, for the latter tests are not to be applied at all and the declaration must be disapproved forthwith unless "the requirements of . . . [Section 7(c)] are satisfied." Therefore, any attempt to inject the preliminary tests of § 7(c) into a consideration of the more rigorous standards of § 7(d) will result in a double application of § 7(c)—a result which in all likelihood was not intended by the Congress. This is not to say that the

nancing the Utility Property Account" which appeared as an appendix to the 1940 Report of the Committee on Corporate Finance of the National Association of Railroad and Utilities Commissioners: "The truth of the matter is that were it not for the fact that we have become so accustomed to seeing a large part of the capital of a utility provided through debt securities, we would realize that even 50 per cent is often open to doubt."

(3) Ratio of Debt and Preferred Stock to Net Assets: A. M. Massie stated that "Debt plus preferred should not exceed 75 per cent of present book value." Loc. cit. p. 35.

[2] See, e. g.: Re Republic Service Corp. (1937) 2 SEC 44; Re Peoples Water & Gas Co. (1938) 3 SEC 430, 24 PUR(NS) 131; Re Public Service Co. of Colorado (1939) 5 SEC 788; Re Consumers Power Co. (1939) 6 SEC 444, 33 PUR(NS) 321; Re Southwestern Gas & E. Co. (1940) 6 SEC 806.

[3] For example, in Re Republic Service Corp. *supra*, refunding bonds were being sold to three of the issuer's common stockholders for investment, and not to the general public (p. 45); in Re Peoples Water & Gas Co. *supra*, the declaration covered bonds that were issued to cure legal defects in the outstanding issue (p. 434); in Re Public Service Co. of Colorado, *supra*, the earnings record of the issuer was so exceptional that a majority of the Commission felt justified in relaxing the standard with respect to capital structure; Commissioner Healy, in a dissenting opinion in the Public Service Company of Colorado Case, stated at p. 856: "Though under the Act the same standards are applicable to refunding issues as to new issues, I know that as a practical matter the standards are often relaxed in favor of refunding." In Re Consumers Power Co. and Re Southwestern Gas & E. Co. *supra*, substantial amounts of new common capital were proposed to be simultaneously contributed by the holding companies. The contribution in the present case also has had some weight in influencing our decision, but it is questionable whether, in future cases, we should regard it as sufficient to support as high debt ratios as are present here.

provisions of § 7(d) are not flexible enough to permit the exercise of administrative policy in the event of unusual circumstances.

We were originally persuaded to make the distinction between refunding and new money issues,[4] on the assumption that any improvement of a bad financial structure is necessarily a step in the right direction, and that the issuer should be permitted to take steps in the right direction, even though his proposals stop short of the point where the resultant financial structure is consistent with sound finance and the objectives of the Act. Most of the refunding issues which have come before the Commission have involved proposals to take advantage of declining interest rates and to substitute low coupon bonds for those originally issued at a higher rate. Interest savings have been substantial, and consequently there have been such improvements in the ratio of earnings to fixed charges as to present a better picture with respect to the new bonds being "reasonably adapted to the earning power of the declarant." In addition, indentures have been modernized, possible conflicts of interest affecting indenture trustees have been eliminated, and similar improvements made in miscellaneous terms and conditions of the securities. Without attempting to minimize the extent of the improvements in the financial condition of the issuer and the protection for investors which may have resulted, it is, nevertheless, the Commission's conclusion that it may have frequently fallen short of giving full effect to the intention of Congress, to the extent that it has permitted refundings without requiring them to fully measure up to the standards of § 7(d).

The Act as a whole was clearly designed to remedy existing situations as well as to prevent future maladjustments of a financial structure. As Commissioner Healy pointed out in his dissenting opinion in one case:

"On the subject of how these sections of the Act should be construed Congress has erected guides or directions. They are found in § 1(b) of the Act. There it is stated 'when such securities are issued upon the basis of fictitious or unsound asset values having no fair relation to the sums invested in or the earning capacity of the properties, and upon the basis of paper profits from intercompany transactions'; 'when such securities are issued by a subsidiary public utility company under circumstances which subject such company to the burden of supporting an overcapitalized structure and tend to prevent voluntary rate reductions'; when operating companies 'enter into transactions in which evils result from an absence of arm's length bargaining'; 'when control' of such companies 'affects accounting practices and rate and dividend . . . policies'; 'when control of such companies is exerted through disproportionately small investment'; 'the holding company becomes an agency which unless regulated is injurious to investors, consumers, and the general public'; and it is declared to be the policy of the Act, *'in accordance with which policy all the provisions of (the Act) shall be interpreted,* to meet the prob-

[4] Chairman Frank in particular desires to confess his previous error in this regard embodied in his concurring opinion in the Southwestern Gas and Electric Company Case, *supra,* note 2.

lems and eliminate the evils' so enumerated."[5]

Thus, where any of the enumerated evils appears in connection with a § 7 declaration, the policy of the Act would seem to require its elimination whether the evil be new or old.

This view is further borne out by the report of the Senate Committee on Interstate Commerce[6] which stated, after summarizing the provisions of § 7(d):

". . . These provisions are designed to give to the Commission continuous supervision over the *revamping of holding company systems* to meet the requirements of Title I looking toward the *establishment of financially sound* and economically integrated units and the avoidance of injury to investors and consumers."[7]

A policy of applying the section so as to permit the perpetuation of unsound capital structures would appear definitely to conflict with the legislative intent.

Aside from the statutory provisions, the wisdom of identical treatment of new money issues and refunding issues is indicated also from the practical point of view. Where corporate debt is excessive and the refunding is accomplished through the sale of new long term obligations, the issuer perpetuates the two attendant major perils—the necessity of paying it off at some date in the future, and the necessity of meeting fixed charges in the meantime.

The dangers of perpetuating a high proportion of debt are well illustrated by the experience of great railroad systems in recent years—experiences which might in many respects have been avoided by financing through a greater proportion of equity securities. In a report to the National Transportation Committee in 1935, Harold G. Moulton and Associates of the Brookings Institution concluded:

"It is not merely illogical that the *permanent* fixed capital of a railroad should be in such a form that the railroad is under legal obligation to repay it in large blocks at fixed dates; it is a financial peril. Often a road which has had no serious difficulty in paying its fixed charges has been very seriously embarrassed by the necessity of finding funds to pay off obligations which represent a permanent investment in the properties. . . . The history of the railroad industry is strewn with the wrecks of companies which have had to refund bonds at a time when for reasons pertaining to the general investment situation rather than to the soundness of the particular enterprise, it was impossible for its management to refinance."[8]

Too many utilities regard their debt as perpetual and make no adequate provision for its ultimate liquidation.[9] There appears to be an abiding faith in the permanency of existing generating and transmission facilities, although it is well known that rapid scientific progress might change the methods of the power industry over-

[5] Re Public Service Co. of Colorado (1939) 5 SEC 788, 853.

[6] Senate Report No. 621, 74th Congress 1st Session on S. 2796, May 13, 1935.

[7] *Id.* at p. 28, italics supplied.

[8] Moulton and Associates, American Transportation Problem (1935) 310.

[9] In this connection it is noteworthy that as a result of numerous recent refundings, it is estimated that some $3,656,200,000 of debt (or well over one-half of the total fixed debt of the utility industry) falls due in the decade from 1961 to 1970. Moreover, it is estimated that $2,543,500,000 of funded debt (or almost 40 per

night.[10] A similar optimism once prevailed in the street railway industry: "As late as 1921 an investment banker wrote—'Sinking funds are found in some of the earlier street railway mortgages, but the present tendency is to omit them, on the theory that a street railway is permanent property and not of a wasting character where sinking funds are essential to reduce the debt as the assets are diminished.' "[11]

The importance of the sinking fund should not be minimized, of course, and the use of sinking funds has been strongly recommended.[12] But too much reliance should not be placed on that device: for sinking fund covenants will constitute default-producing obligations unless they are made dependent upon earnings, in which event they are not always effective; and, to meet future stresses and strains (including those resulting from technological changes), what is needed is a flexibility which additional fixed obligations do not afford. Moreover, the effectiveness of amortizing debt out of earnings is itself dependent upon a strong policy favoring equity financing, for obviously it will accomplish little to retire old debt out of earnings if at the same time new capital is being raised by issuing an excessive amount of new debt. The conclusion is inescapable that an adequate proportion of equity financing is appropriate both for reducing excess debt and for raising new capital, whenever and to the extent that the security markets permit.[13]

In addition to the danger arising out of the fixed maturities of excessive debt, the strain caused by heavy fixed charges in lean years will be detrimental to services furnished to the public. Again with respect to the railroads, the Interstate Commerce Commission has said:

"Naturally carrier executives try to prevent default on fixed obligations even if doing so may result in allowing property to deteriorate and service to suffer."[14]

In pointing out the advantages of common stock over fixed obligations, the same Commission later said:

"There is no legal obligation to pay dividends, so that failure to earn them results only in loss for the time being to stockholders. But fixed interest is a contractual obligation, and failure to pay it may result in bankruptcy or receivership proceedings. . . . In view of the relatively large volume of their indebtedness, therefore, many railroads have been driven into receivership or bankruptcy, and many more have curtailed expenditures drastically, often to the detriment of their

cent of the total) falls due in the five years from 1965 to 1969. Experts have suggested that this may constitute an undue concentration of maturities and a possible future source of trouble to the utility industry. 21 Savings Bank Journal (May, 1940) 40.

[10] See address by Floyd L. Carlisle, delivered before the Empire State Gas & Electric Association, N. Y. Times, September 28, 1940, p. 21.

[11] Report of Special Committee on Public Utility Finance, of the National Association of Railroad and Utilities Commissioners (1938) Proceedings of the Fiftieth Annual Convention, 411.

[12] *Id.*, 408–411. In 1933, the Interstate Commerce Commission adopted a policy of requiring sinking funds to be set up for the purpose of retiring debt out of net income, as one means "of bringing about a reversal of the present trend in railway financing." 47th Annual Report (1933) 25, 26.

[13] Cf. American Transportation Problem, *supra*, note 8. The conclusions reached in that report are applicable to the utility industry with even greater force, as it is still a rapidly expanding industry.

[14] 47th Annual Report (1933) 25, 26.

properties, to escape such proceedings. This has been the most demoralizing feature of present railroad ills, and the one that has particularly attracted the attention of the country."[15]

Deterioration of property and service in the railroad industry is a hazard no more harmful to the public interest than would be a similar deterioration in the utility field. Thus it has been demonstrated that perpetuation of too much debt is potentially injurious not only to the investor, who is apt to lose his investment, but to the consumer and the public as well. The Commission, of course, has no responsibility for unsound debt structures created by utility companies prior to regulation under the Holding Company Act. The Commission, however, does bear a heavy responsibility for the perpetuation of such structures through refunding issues brought here under the Act. It would be small consolation to investors, consumers, and the general public to be told that top-heavy capital structures were not *created* under the Commission's administration of the Holding Company Act, but were only *perpetuated* under it because of hesitancy on the Commission's part to act. Some state Commissions have recognized this responsibility and have inquired into the refunding issue as thoroughly as if it constituted new financing.[16]

The usual argument advanced these days by managements in support of refunding through the issuance and sale of new funded debt is that low interest rates are obtainable and will result in substantial savings to "the company." This usually means that more earnings will become available for dividends on the common stock, which, in the cases coming before us, is generally held by the holding companies. What is meant by the term "the company" in this context is, therefore, the common stock of the subsidiary owned by the holding company. The view is not urged that the benefit to the controlling holding company, arising from additional savings through the refunding issues of a subsidiary, is necessarily detrimental to the interests of the public, investors, or consumers. All of these interests may derive an indirect benefit from savings in interest rates, but such benefits must be balanced against the detriments which flow from perpetuation of excessive debt. In considering these matters, we must give due weight to the language and legislative history of the Holding Company Act which demonstrate that one of the major congressional objectives was to eliminate control of operating utility subsidiaries by holding companies whose common stock ownership represents a disproportionately small investment in those subsidiaries. Among the evils enumerated in § 1 of the Act, 15 USCA § 79a is that which exists when control of subsidiary public utility companies "is exerted through disproportionately small investment . . ." [subsection (b)(3)]. It is declared to be the policy of the Act, "in accordance with which policy all the provisions of this title shall be interpreted, to meet the problems and eliminate the evils as enumerated in this section . . ." [subsection (c)]. In the hearings before the congressional committees and in the de-

[15] 52d Annual Report (1938) 3, 4.

[16] E. g. see Re Metropolitan Edison Co. (1935) 10 PUR(NS) 233.

bates in Congress the point was made repeatedly that one of the major purposes of the legislation was to protect the direct public investors in subsidiary companies' bonds and preferred stock against the disproportionate control, exercised through small investment in common stock, by the controlling holding company. For it was pointed out that one of the major abuses committed by the holding companies was the exploitation of their controlled subsidiaries through the taking-up into the holding company of an excessive amount of the earnings of the subsidiaries; in that way the earnings, which otherwise would create a protective reservoir for the investment of the "senior security holders" in those subsidiaries, were siphoned off to the grave disadvantage of such senior security holders.[17]

Aversion to common stock financing often derives from a desire on the part of the holding company as owner of the existing common stock of operating companies to maintain excessive leverage. Additional common stock financing, the holding company fears, may diminish the leverage exercised by it through its common stock ownership in its subsidiary. This excessive use of leverage is akin to the abuse of "pyramiding"—a misuse of other people's money, and one of the evils which the Holding Company Act was designed to eliminate.[18]

To refuse to permit the issuance of obligations to refund outstanding issues, where the security structure would not be sound, is not at all to penalize the common stock. It is rather to prevent new public investors in senior securities of utilities being brought in until such time as the controlling common stock interests, i. e., the holding companies, are willing and able to refinance in such a way as to bring about a sound structure. Replacing some of the existing debt by the sale of common stock may be at an apparent "cost" of 9 per cent or 10 per cent[19] yet actually it may cost the issuer's stockholders nothing, and, moreover, may add a substantial margin of safety to the remaining senior securities.[20] On the other hand, a mere reduction in interest rates may

[17] This point was developed at greater length in our opinion and appendix in Northeastern Water & Electric Corp. Holding Company Act Release No. 2314, October 2, 1940, 36 PUR (NS) 13.

[18] See Northeastern Water & Electric Corp. *supra*, note 17.

[19] In discussing the relative merits of debt versus equity financing, it is often pointed out to us in these times that money can be obtained at an annual cost of 3 per cent through the issuance of obligations as against an annual "cost" of 9 or 10 per cent through the issuance of common stock. We doubt the validity of the comparison and think it is the result of a confusion of terms; for while the cost of debt financing is measured by the amount the issuer must pay in interest and discount over the life of the obligations, the alleged cost of common stock financing is not based on any fixed charge or default-producing obligation, but is measured by the amount of net earnings of the issuer applicable to the common stock. Thus, reference to a possible 10 per cent "cost" of money obtained through the sale of common stock means that such stock could be sold at ten times the current net earnings per share, and the proceeds would actually cost the issuer itself nothing.

It may be that such a sale would cut down the equity or the voting control held by existing stockholders, but that is a different question. The factors to be considered there would include (a) how the common stock was held; (b) how much actual investment it represented; and (c) to what extent the sale of new common would actually affect the existing stockholders' interests. As pointed out above, the Commission's initial concern under the Act, in refunding as well as new money issues, of course, must be for the welfare of the investors in senior securities of operating companies.

[20] For general discussions of the importance to senior security holders of an adequate com-

be only an apparent benefit, creating the illusion that the capital structure is being strengthened because of an increase in earnings coverage, but in reality perpetuating a top-heavy debt structure that subjects the company to the risk of default and the common stock to the risk of being completely wiped out.

Perpetuation of a high debt structure through refundings may thus be a policy which is unsafe except for a short run. For in times of trouble, earnings fall off and continued depression may bring about such a weight of fixed charges on excessive debt that bankruptcy ensues. Or bankruptcy may ensue from default on debt at maturity when further refunding is impossible because of adverse market, industrial, or general economic conditions. If bankruptcy comes, the fairness of a reorganization plan must be tested by the doctrine of "full or absolute priority" as reaffirmed by the United States Supreme Court in Case v. Los Angeles Lumber Products Co.[21] In many instances, this means that the common stockholders may be denied participation in the reorganized company because of the absence of sufficient value to cover the senior interests in the bankrupt company. Refundings, despite their immediate benefits, may thus forebode a dire future, in the long run, for the common stockholders, although it may benefit them in the short run.[22]

The truth, disclosed by railroad financial history, is that it was usually when interest rates were low and debt financing was used (because it was, in short-run terms, attractive to the owners of the controlling stock), that further common stock financing on the most favorable terms was also possible. The railroads let the chance to do common stock financing go by, and when it later became impossible to do debt financing, common stock financing was also impossible.[23] The time to do common stock financing is usually the

mon stock "cushion" or "margin," see SEC, Protective Committee Report, Part VII, pp. 487–8; Graham and Dodd, Security Analysis (2d ed. 1940) pp. 269–273; *Cf.* SEC, Report on Investment Trusts and Investment Companies, Part III, Chap. V, pp. 13, 29.

[21] (1939) 308 US 106, 84 L ed 110, 60 S Ct 1; rehearing denied, *Id.* 308 US 637, 84 L ed 529, 60 S Ct 258. Both the Interstate Commerce Commission and the Securities and Exchange Commission have applied this test for some time in reorganization cases. See, e. g. In Re Spokane International R. Co. (1938) 228 Inters Com Rep 387; Re Chicago & E. I. R. Co. (1938) 230 Inters Com Rep 199; Re Genesee Valley Gas Co. (1938) 3 SEC 104; Re West Ohio Gas Co. (1938) 3 SEC 1014, 26 PUR(NS) 338; Re Utilities Power & Light Corp. (1939) 5 SEC 483.

[22] There is only a seeming inconsistency between a policy which favors stock financing and the application of the doctine of the Los Angeles Case which tends to wipe out junior interests. The two are in truth consistent with one another since the Los Angeles doctrine stands as a warning to the common stockholders that if the equity investment is insufficient—that is, if there is excessive debt —the bankruptcy, which is, on that account, made more likely, will wipe them out. Professor Dodd, in discussing the doctrine of the Los Angeles Case, has granted the force of the argument that "the enforcement of such a rule is less likely to make investment in shares unpopular than it is to deter investors from trading on a thin equity, a practice which may be discouraged with advantage to the community." Dodd, Los Angeles Lumber Products Case and Its Implications (1940) 53 Harv. L. Rev. 713, 723.

[23] In an exhaustive study of the railroad problem made by Harold G. Moulton and Associates, the American Transportation Problem (1935), it was concluded at p. 312:

"Apart from a possible general revaluation of debt in which the railroads might share along with other debtors, there are only three ways in which the *railroads can cut down their fixed charges.* One is *by selling stock to refund bonds—a solution which is out of the picture for the time being. Should financial market conditions again make it possible, prudence demands that it be utilized to the full.* Second, there is the slow process of

very time when debt financing on easy terms is available. To postpone common stock financing at such a time means, too often, that it will never be done. The argument as to the "expense" of raising money through the sale of common stock is thus, very often, an argument against ever doing adequate common stock financing.[24]

It is a striking fact that the common stocks of only a relatively small number of operating utility companies have been available for direct investment by the general public. Investors, therefore, have for the most part been restricted to investment in low interest bearing bonds and preferred stocks of utilities, or in the more speculative holding company securities. As a result, during the past year or two the investing public has welcomed the opportunity to purchase the common stocks of operating utilities in those instances in which they have been offered for public sale. For example, in complying with § 11, 15 USCA § 79k, the Utilities Power & Light Corporation (now the Ogden Corporation), effected successful sales of the common stock of two of its operating companies, Newport Electric Corporation[25] and Indianapolis Power & Light Corporation.[26] Similarly, Washington & Suburban Companies successfully sold to the public its common stock interest in Washington Gas Light Company.[27] In another recent instance, a subsidiary of American Water Works and Electric Company, Inc., West Penn Power Company,[28] successfully sold a block of additional common stock to the general public through underwriters.[29] In each of these cases the holding company which sold the common stock of its operating subsidiary obtained a price advantageous to it and to its investors. Financial experts have also expressed opinions that a great many public utilities could similarly sell common stock.[30]

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amortizing debt out of earnings. The practicability of this procedure like that of the first, depends largely on the revival of the stock market. For it will be of little avail to amortize existing debt out of earnings if new capital has to be obtained by selling new funded debt. The third way out is by reorganization of the individual road on the basis of its individual financial difficulties." (Italics supplied.)

[24] C. W. Kellogg, president of the Edison Electric Institute, has written that "common stock money is the one final and necessary foundation that makes the whole structure stand up." Kellogg, Audit of 1937 Electric Utility Business, Electrical World, January 15. 1938.

[25] Holding Company Act Release No. 1545, May 23, 1939.

[26] Holding Company Act Release No. 2001, April 2, 1940.

[27] Holding Company Act Release No. 1670, August 10, 1939.

[28] Holding Company Act Release No. 2009, April 9, 1940, 34 PUR(NS) 36.

[29] Other recent evidence that common stocks of utility operating companies are finding a ready market is reflected in the fact that as of October 6, 1940, investors had converted into common stock more than $98,000,000 of the original $129,000,000 issue of convertible debentures of Commonwealth Edison Company which were issued in 1938.

[30] W. D. Gay, of Standard Statistics, recently said: "I have very laboriously gone through all the stock investments of the holding companies and found that stocks which contributed at least 50 per cent of the gross revenues of the holding companies are equal or superior to the Indianapolis Power & Light issue. So I would say that at least one-half of the subsidiaries of the holding companies can sell common stock if Indianapolis Power & Light can do so. If you added the independently owned companies, you would find even greater proportion of the industry could sell common stock." 21 Savings Bank Journal (May, 1940) 39.

On the same occasion, Sydney Mitchell, of Bonbright & Company, said: "According to a study published recently in the Public Utilities Fortnightly, about 55 per cent of the assets of the public utility industry were in the hands of companies which, according to the author, could perfectly well sell common stock." *Id.* at p. 38.

Our staff has made a study of the capital structures of a representative group of operating utility companies part or all of whose common stocks are outstanding with the public.[31] It is interesting to note that the capital structures of these operating utility companies have a materially smaller proportion of funded debt to total capitalization and surplus than most subsidiaries of registered public utility holding companies. For the year ending 1939 only two of these operating companies had funded debt to the extent of more than 50 per cent of their total capitalization and surplus. One is a former subsidiary of a registered holding company; the other has no preferred stock outstanding, and by the subsequent conversion of a large amount of convertible debentures into common stock, its funded debt ratio is now less than 50 per cent. The funded debt of eight of these companies amounted to less than 40 per cent of total capitalization and surplus.

All of the problems that we have discussed above must, of course, be considered in the light of the circumstances surrounding the particular transaction, and we make no attempt here to lay down a hard and fast rule. We hereby indicate, however, that in the future, in applying the standards of § 7(d), the Commission will follow the policy announced in our foregoing opinion.

[31] A table showing the results of this study is attached to this memorandum.

CAPITALIZATION RATIOS
(As of December 31, 1939)
Of Various Operating Utility Companies
All or Part of Whose Common Stocks are Publicly Owned

Company	Funded Debt and Notes (Per Cent)	Preferred Stock (Per Cent)	Minority Interest (Per Cent)	Common Stock and Surplus (Per Cent)	Total Capitalization and Surplus (Per Cent)
Bangor Hydro-Electric Co.	41.5	25.3	—	33.2	100.0
Boston Edison Co.	33.3	—	—	66.7	100.0
Central Hudson Gas & Elec. Corp.	37.4	18.4	—	44.2	100.0
Cleveland Electric Illuminating Co.	33.5	21.4	—	45.1	100.0
Commonwealth Edison Co. and Subs.	55.9[1]	—	0.1	44.0	100.0
Connecticut Light & Power Co.	46.9	6.4	—	46.7	100.0
Consolidated Edison Co., N. Y. and Subs.	39.4	16.3	0.2	44.1	100.0
Consolidated Gas, Electric Light & Power Co. of Baltimore	48.8	15.5	—	35.7	100.0
Detroit Edison Co.	48.1	—	—	51.9	100.0
Duke Power Company	27.7	0.1	—	72.2	100.0
Hartford Electric Co.	11.9	—	—	89.1	100.0
Pacific Gas & Electric Co.	45.6	21.3	—	33.1	100.0
Southern California Edison Co.	44.4	26.4	—	29.2	100.0
Tampa Electric Co.	—	6.5	—	93.5	100.0
Indianapolis Power & Light Co.	55.7	20.3	—	24.0	100.0
Newport Electric Corp.	27.8	28.5	—	43.7	100.0
Washington Gas Light Company	47.7	9.7	—	42.6	100.0
West Penn Power Co.	48.3	24.5	—	27.2	100.0

[1] Subsequently reduced below 50 per cent through debenture conversions.

ORDER

Engineers Public Service Company, a registered holding company, El Paso Electric Company, a Delaware corporation and a registered holding company, El Paso Electric Company, a Texas corporation, and Mesilla Valley Electric Company, the last two named companies being subsidiary companies of said Engineers Public Service Company and said El Paso Electric Company (the Delaware corporation), having filed various applications and declarations pursuant to §§ 7, 10, and 12 of the Public Utility Holding Company Act of 1935, 15 USCA §§ 79g, 79j, 79k; said applications and declarations having been amended, particularly by amendments No. 9 and No. 10, said amendments having particular reference to the issuance and sale of the following securities by El Paso Electric Company, the Texas corporation: $6,500,000 principal amount of first mortgage bonds, series A, 3¼ per cent, due 1970; a serial bank note, 2–2¼ per cent; and 15,000 shares of $4.50 dividend preferred stock; the Commission having considered the oral argument and briefs and the record herein and the applications and declarations, particularly as amended by amendments No. 9 and No. 10;

It is *ordered* that said applications be and the same hereby are granted and that the declarations be and become effective forthwith, subject, however, to the following terms and conditions:

1. That the transactions herein shall be carried out in the manner and upon the terms prescribed by said applications and declarations, particularly as amended by amendments No. 9 and No. 10.

2. That within ten days after the consummation of the various transactions, applicants and declarants file a certificate of notification.

3. That when all expenses, incurred in connection with the issue and sale of the securities and the preparation and prosecution of the applications concerned with the present transactions shall be actually paid, the applicants and declarants shall file a detailed statement of such expenses showing the names of persons or entities to whom such payments were made, the amounts of such payments, the accounts charged and a detailed description of the services rendered for which such payments were made.

4. That within ninety days from the date hereof, El Paso (Texas) and Juarez shall submit to this Commission a plan of fair and equitable reallocation of costs as between the transportation operations and electrical operations of said companies, the Commission reserving jurisdiction to review said plan. This condition shall not be considered a condition precedent to the consummation of the other transactions.

Re United Gas Improvement Company et al.

[File No. 59-6, Release No. 2500.]

Intercorporate relations, § 19.5 — Holding company system — Geographical integration.

1. The standard established by Clause (B) of § 11(b) (1) of the Holding Company Act, 15 USCA § 79k (b) (1) means that a holding company may continue to control an integrated public utility system or systems additional to the "single" integrated public utility systems only if all such additional system or systems are located in the same state or states in which the "single" system is located, or in states adjoining thereto, p. 93.

Intercorporate relations, § 19.6 — Holding company system — Simplification — Retention of "other businesses."

2. The Commission must, under § 11(b) (1) of the Holding Company Act, permit the retention in a holding company system of other businesses, including investment interests in utilities not subsidiaries, which are found to be reasonably incidental, or economically necessary or appropriate to the operations of an integrated public utility system retainable under the control of a holding company, and these requirements may be met in the case of interests in nonutility businesses if their retention is found to be necessary or appropriate in the public interest or for the protection of investors or consumers and not detrimental to the proper functioning of such system or systems, p. 93.

Intercorporate relations, § 19.5 — Holding company system — Single integrated system.

3. The single integrated public utility system to which the control of a registered holding company should be limited was held to be the units of electric generating plants, transmission lines, and distribution facilities owned or operated in the southeastern portion of the state of Pennsylvania and in the adjoining northern portions of the states of Maryland and Delaware by named subsidiary companies, under § 11(b)(1) of the Holding Company Act, and to exclude utility assets owned or operated by subsidiaries in Arizona, New Hampshire, Tennessee, Kansas, and Connecticut, pursuant to Clause (B) of § 11(b) (1), p. 95.

Intercorporate relations, § 19.6 — Holding company system — Integrated system — Nonutility property.

4. Steam operation facilities owned or operated by subsidiaries of a holding company in the area approved for operation of an integrated system were held to be retainable as interests in other businesses reasonably incidental and appropriate to the integrated public utility system, p. 95.

[January 18, 1941; February 7, 1941.]

PROCEEDING *instituted by Commission with respect to a registered holding company and its subsidiary companies pursuant to § 11(b)(1) of the Holding Company Act; tentative conclusions of Commission stated and order issued reconvening hearing.*

By the COMMISSION: Pursuant to respondents' request and the Commission's undertaking in its opinion bearing date May 23, 1940, there are set forth hereinafter the tentative conclusions of the Commission as to the action which the respondents must take under the provisions of § 11(b) (1) of the Holding Company Act, 15 USCA § 79k. Since respondents' request for such conclusions was made at the outset of the proceeding, the views here expressed must of necessity be entirely tentative in character.

To aid it in arriving at its conclusions, the Commission directed its staff to prepare a report setting forth informative data with respect to The United Gas Improvement Company holding company system and suggesting the application of the pertinent provisions of the act. The Commission also directed its staff to prepare a memorandum with respect to the interpretation of one of the provisions of the act. Copies of this report and memorandum will be furnished the respondents simultaneously with this statement.

I

Applicable Statutory Provisions

For convenience, we repeat here the full text of the principal statutory provisions applicable to the present proceeding.

Section 11(b) (1) of the act provides:

"(b) It shall be the duty of the Commission, as soon as practicable after January 1, 1938:

"(1) To require by order, after notice and opportunity for hearing, that each registered holding company, and each subsidiary company thereof, shall take such action as the Commission shall find necessary to limit the operations of the holding company system of which such company is a part to a single integrated public utility system, and to such other businesses as are reasonably incidental, or economically necessary or appropriate to the operations of such integrated public utility system: *Provided, however,* that the Commission shall permit a registered holding company to continue to control one or more additional integrated public utility systems, if, after notice and opportunity for hearing, it finds that—

"(A) Each of such additional systems cannot be operated as an independent system without the loss of substantial economies which can be secured by the retention of control by such holding company of such system;

"(B) All of such additional systems are located in one state, or in adjoining states, or in a contiguous foreign country; and

"(C) The continued combination of such systems under the control of such holding company is not so large (considering the state of the art and the area or region affected) as to impair the advantages of localized management, efficient operation, or the effectiveness of regulation.

"The Commission may permit as reasonably incidental, or economically necessary or appropriate to the operations of one or more integrated public utility systems the retention of an interest in any business (other than the business of a public utility company as such) which the Commission shall find necessary or appropriate in the public interest or for the protection of investors or consumers and not detri-

mental to the proper functioning of such system or systems."

Most of the words and phrases used in the above provision are either self-explanatory or are defined in § 2 of the act. Of the latter, the principal definition is that of an integrated public utility system which is defined in § 2 (a) (29) of the act, 15 USCA § 79b as follows:

"(29) 'Integrated public utility system' means—

"(A) As applied to electric utility companies, a system consisting of one or more units of generating plants and/or transmission lines and/or distributing facilities, whose utility assets, whether owned by one or more electric utility companies, are physically interconnected or capable of physical interconnection and which under normal conditions may be economically operated as a single interconnected and coördinated system confined in its operations to a single area or region, in one or more states, not so large as to impair (considering the state of the art and the area or region affected) the advantages of localized management, efficient operation, and the effectiveness of regulation; and

"(B) As applied to gas utility companies, a system consisting of one or more gas utility companies which are so located and related that substantial economies may be effectuated by being operated as a single coördinated system confined in its operations to a single area or region, in one or more states, not so large as to impair (considering the state of the art and the area or region affected) the advantages of localized management, efficient operation, and the effectiveness of regulation: *Provided,* that gas utility companies deriving natural gas from a common source of supply may be deemed to be included in a single area or region."

Interpretation of Certain Provisions of § 11 (b) (1)

In the application of the provisions of the act, as in the application of other important statutes, certain interpretative problems are presented. Some of these have been dealt with heretofore in our opinions, after oral argument and full consideration, and need not be mentioned further. We have not heretofore had occasion to deal with other questions of interpretation which have arisen in fulfilling the Commission's undertaking of informing respondents of action the Commission tentatively believes to be necessary under § 11 (b) (1), *supra.* Attention is, therefore, called to these interpretations which, like the other conclusions, are under the circumstances necessarily tentative.

A. *The Interpretation of Clause (B)*

[1] In construing the standard established by Clause (B) of § 11(b) (1), we have tentatively concluded that it means that a holding company may continue to control an integrated public utility system or systems additional to the "single" integrated public utility systems only if all such additional system or systems are located in the same state or states in which the "single" system is located, or in states adjoining thereto.

B. *Interest in "Other Businesses" Clauses*

[2] Section 11(b) (1) contains two references to interests in "other businesses." We have tentatively concluded

ed that these provisions taken together mean that the Commission must permit the retention of other businesses, including investment interests in utilities not subsidiaries, which are found to be reasonably incidental, or economically necessary or appropriate to the operations of an integrated public utility system retainable under the control of a holding company, and that these requirements may be met in the case of interests in nonutility businesses if their retention is found to be necessary or appropriate in the public interest or for the protection of investors or consumers and not detrimental to the proper functioning of such system or systems.

II

The Proceeding Thus Far

The United Gas Improvement Company, a holding company for securities of certain public utility companies as well as miscellaneous other businesses, on June 24, 1938, registered as a holding company [1] under the Public Utility Holding Company Act of 1935. On March 4, 1940, the Commission issued a notice of and order for hearing [2] pursuant to § 11(b) (1) of the act with respect to The United Gas Improvement Company and its subsidiary companies, respondents, stating therein that it appears that The United Gas Improvement Company holding company system is not confined in its operations to that of a single integrated public utility system and to such other businesses as are reasonably incidental or economically necessary or appropriate to the operations of such an integrated public utility system within the meaning of the act.

Subsequent thereto, The United Gas Improvement Company and various of its subsidiary companies requested that they be furnished with a statement of the Commission more particularly specifying the underlying tentative conclusions with respect to particular portions of the present system upon which the tentative conclusions referred to hereinabove were predicated, and the respondents further requested that they be informed by the Commission as to what action the Commission tentatively believes would be required by § 11(b) (1) of the act. On May 23, 1940, the Commission, in its opinion issued that date (Holding Company Act Release No. 2065), 33 PUR(NS) 285, 288, undertook to grant the request of the respondents,[3] stating therein: "We

[1] The United Gas Improvement Company in turn is a subsidary of The United Corporation, likewise a registered holding company under the act.

[2] On August 2, 1940, the Commission issued a supplemental notice of and order for hearing pursuant to such section naming certain additional companies as respondents. In that order, as well as by Commission orders of April 23, May 10, and December 3, 1940, certain companies named in the original orders which had been dissolved or sold were dismissed as respondents and Midland United Company and Midland Utilities Company and their direct or indirect subsidiary companies were likewise dismissed as respondents in this proceeding with the reservation, among others, that such dismissal be not deemed to limit the power of the Commission to issue any appropriate order directed to The United Gas Improvement Company and its subsidiary companies (other than Midland United Company and Midland Utilities Company, and their subsidiaries) with respect to their direct or indirect holdings in such companies.

[3] When the Commission opinion of May 23, 1940, *supra*, undertaking to furnish the statement requested by respondents was issued, Commissioner Healy did not concur in the undertaking to furnish a statement setting forth conclusions as to the A and C standards since it involved a determination as to issues on which he tentatively thought the respondents had the burden of proof. Since the

consider the notice already given as adequate at this stage of the proceeding. Nevertheless, since the respondents have requested a recitation of the Commission's tentative conclusions, together with a full description of 'such action as the Commission has tentatively concluded to be necessary under the provisions of § 11(b) (1),' at the outset of the proceeding, and since no person could be injured by such statement, we are willing to enlarge our original notice."

Pending the preparation and issuance of such a statement by the Commission, the proceedings have been held in abeyance.

III

Application of Section 11(b) (1) of the Act

As shown by the notice of and order for hearing previously issued in this proceeding, the present The United Gas Improvement Company holding company system is engaged in extensive electric and gas operations in a number of states, being principally concentrated in the state of Pennsylvania and adjacent portions of Maryland and Delaware and also in the state of Connecticut. Certain subsidiary companies also are engaged in various nonutility businesses in various parts of the country, and, in addition, the system holds large investments in both utility and nonutility businesses.

In the light of the foregoing, we now proceed to set forth our tentative conclusions as to the application of § 11(b) (1) of the act to The United Gas Improvement Company and its subsidiary companies and properties owned or operated thereby.

A. *The Single Integrated System*

[3, 4] The single integrated public utility system to which the control of The United Gas Improvement Company should be limited is composed of the units of electric generating plants, transmission lines, and distribution facilities owned or operated in the southeastern portion of the state of Pennsylvania and in the adjoining northern portions of the states of Maryland and Delaware by the following named subsidiary companies:

Philadelphia Electric Company; Chester County Light and Power Company; Delaware Power and Light Company;[4] Philadelphia Hydro-Electric Company; Philadelphia Electric Power Company; The Susquehanna Power Company; The Susquehanna Electric Company; Conowingo Power Company; Southern Pennsylvania Power Company; Deepwater Light and Power Company; Deepwater Operating Company.

This integrated public utility system includes territory approximating eighty miles by thirty miles in area, extending into three states, and having a population of approximatey 3,000,000 persons. The electric properties comprising the integrated system have an aggregate book value of approxi-

Commission has undertaken to grant respondents' request in its entirety and since there is no other means of compliance with this undertaking, he now joins in this statement.

[4] Questions as to whether the electric utility assets of Delaware Power and Light Company serving the northern part of Delaware may be included as a part of such integrated system at this time are resolved in favor of retention in order to give a reasonable opportunity to see if, under the narrowed interests of the holding company, the objectives of the act are satisfied with such a combination of units.

mately $350,000,000 and the operations of such properties during 1939 produced in excess of $68,000,000 of electric operating revenues and electric operating income of approximately $29,000,000.

B. *Nonutility Properties Incidental to the Single Integrated System*

1. The steam operation facilities owned or operated by Philadelphia Electric Company, Wayne Steam Heat Company, and Philadelphia Steam Company in this area are retainable under the control of the holding company as interests in other businesses reasonably incidental and appropriate to the aforementioned integrated public utility system.

2. It does not appear practical for the Commission at this time to determine the extent to which the real estate owned or held by South Pennsgrove Realty Company, The Utilities Realty Company, and Electric Realty Corporation is possible of retention; however, such real estate may be retained to the extent that it is used or capable of utilization in connection with the operations of this integrated electric utility system.

3. The interests in no other business (except for miscellaneous investments, as referred to hereafter) are reasonably incidental, or economically necessary or appropriate, to the operations of the integrated public utility system described.

C. *Properties Not Possible of Retention under Clause (B) of § 11(b) (1)*

The application of Clause (B) of § 11(b) (1) precludes the retention under the control of The United Gas Improvement Company [5] of the utility assets owned or operated by The Arizona Power Corporation in the state of Arizona, by Concord Gas Company and Manchester Gas Company in the state of New Hampshire, by Nashville Gas and Heating Company in the state of Tennessee, by The Wyandotte County Gas Company in the state of Kansas, by the Connecticut Light and Power Company and New Haven Gas Light Company in the state of Connecticut.

D. *Properties as to Which Clauses A and C of § 11(b) (1) Precludes Retention*

1. The Commission expresses no conclusion as to whether the electric utility assets owned or operated by Erie County Electric Company constitute an integrated electric utility system or systems inasmuch as it appears unlikely that, irrespective of such status, the standards of (A) and (C) of § 11(b) (1) could be satisfied, and that accordingly retention by The United Gas Improvement Company is precluded.

2. The Commission expresses no conclusion as to whether the electric or gas facilities of Luzerne County Gas and Electric Corporation constitute

[5] Midland United Company and Midland Utilities Company and their subsidiaries are subsidiaries of The United Gas Improvement Company. These companies are in reorganization under the provisions of the Federal Bankruptcy Act and, from information on file with the Commission, there is reason to believe that upon consummation of such proceedings they will cease to be subsidiaries of The United Gas Improvement Company. Accordingly, at this time, consideration has been given to them only as investments in another business.

two or more integrated public utility systems inasmuch as it appears unlikely that, irrespective of such status, the standards of Clause (A) of § 11(b) (1) of the act could be satisfied, and that accordingly retention by The United Gas Improvement Company is precluded.

3. The Commission expresses no conclusion as to whether the gas companies, to wit: Consumers Gas Company, Lebanon Valley Gas Company, The Harrisburg Gas Company, and Allentown-Bethlehem Gas Company, or the gas facilities owned or operated by Philadelphia Electric Company, The Philadelphia Gas Works Company, Chester County Light and Power Company, and Delaware Power and Light Company, in or adjacent to the area served by the integrated electric utility system, constitute one or more integrated public utility system or systems inasmuch as it appears unlikely that irrespective of such status, the standards of Clauses (A) and (C) of § 11(b) (1) of the act could be satisfied, and that, accordingly, retention by The United Gas Improvement Company is precluded.

E. *Properties Possibly Affected by Pending Applications*

The Hartford Gas Company and the Public Service Corporation of New Jersey have filed applications (now pending) for orders declaring them not to be subsidiaries of The United Gas Improvement Company. Consequently their status has been considered under alternative assumptions as to the disposition of these applications.

1. If the application filed by Hartford Gas Company should be denied, retention under the control of The United Gas Improvement Company would be precluded by the provision of Clause (B) of § 11(b) (1). If the application should be granted, retention would be precluded by the standards applicable to interests in other businesses.

2. The Commission expresses no conclusion as to whether the electric or gas facilities of Public Service Corporation of New Jersey and its subsidiaries constitute two or more integrated public utility systems inasmuch as it appears that, irrespective of such status, if the pending application should be denied, retention under the control of The United Gas Improvement Company would be precluded under Clauses (A) and (C) of § 11(b) (1). If the application should be granted, retention would be precluded by the standards applicable to interests in other businesses.

F. Other Interests

1. *Other businesses conducted by subsidiary companies.*

Businesses conducted by subsidiary companies of The United Gas Improvement Company, other than those as to which specific reference has been made, are not reasonably incidental or economically necessary or appropriate to the operation of the integrated electric utility system described, and are not possible of retention under the control of such holding company.

2. *Ownership of securities issued by public utility holding companies or public utility companies.*

It is not reasonably incidental, economically necessary or appropriate for The United Gas Improvement Com-

pany, or companies retaining control of the electric utility assets utilized in connection with the operations of the integrated electric utility system described, to retain their present holdings in securities issued by public utility holding companies or public utility companies other than those included within such integrated public utility system.

3. *Other securities.*

It does not appear practical at this time to determine whether securities held for the purpose of investment (other than those as to which conclusions are set forth above), are retainable by the holding company system, and the Commission will defer consideration of such matter until after the other issues raised by the proceeding have been determined.

III

Order Reconvening Hearing

It is hereby *ordered* that a hearing be held on February 6, 1941, at ten o'clock in the forenoon of that day, in Room 1102 of the Securities and Exchange Commission Building, 1778 Pennsylvania Avenue, N. W., Washington, D. C., at which time the Commission will hear the respondents as to the issues present in this proceeding, and will consider the simplification of the issues, the facts and issues that appear to be without substantial basis of controversy, the order of presentation of evidence most conducive to an orderly proceeding, and such other matters as may aid in the disposition of the proceeding.

By the Commission (Chairman Frank, Commissioners Healy, Eicher, Henderson and Pike).

Editor's Note—The Commission by order entered February 7, 1941, adjourned the hearing date to February 20, 1941, and provided further "that if the respondents take issue with the tentative interpretation of Clause (B) or the provisions as to retention of interests in other businesses of § 11(b) (1) of the Public Utility Holding Company Act of 1935 expressed in the Commission's Tentative Statement of Conclusions issued January 18, 1941, the respondents at such reconvened hearing shall present their arguments with respect thereto."

TENNESSEE RAILROAD AND PUBLIC UTILITIES COMMISSION

T. F. Lance et al.

v.

Franklin Power & Light Company

[Docket No. 2402.]

Monopoly and competition, § 29 — Territorial agreements.

1. A contract, approved by the Commission, between the Tennessee Valley Authority and an electric company, prohibiting the company from serving

customers in territory of another company which has sold its properties to the Federal authority, should not be disturbed so as to permit service to such customers after transfer of the properties by TVA to a rural coöperative corporation, p. 103.

Monopoly and competition, § 54.1 — Electric coöperative — Public policy.

2. The public policy of the state to prevent unwarranted competition between operating utilities should be followed when customers of an electric coöperative organization seek a transfer to the system of a company-owned utility, although the membership corporation is a nonutility beyond the jurisdiction of the Commission, p. 103.

Mutual companies, § 2 — Jurisdiction of Commission — Electric coöperative.

Discussion of the limited jurisdiction of the Tennessee Commission over a nonprofit coöperative or electric membership corporation, p. 102.

Expenses, § 33 — Capital amortization — Coöperative electric organization.

Discussion of amortization charges to customers by a nonprofit coöperative or electric membership corporation for debt retirement on distribution facilities, p. 102.

[January 23, 1941.]

PETITION *by customers of nonprofit coöperative or electric membership corporation for order requiring service from a company-owned electric utility; denied.*

By the COMMISSION: This matter came on to be heard on the 22nd day of November, 1940, upon the petition of T. F. Lance, a citizen of Williamson county, Tennessee. The petition alleges that petitioner resides some three hundred yards from the town of Franklin in a small subdivision known as Myles Manor subdivision; that the Franklin Power and Light Company is a public utility serving Franklin and the territory immediately adjacent thereto, including a part of the aforesaid subdivision; that petitioner is now served by the Middle Tennessee Electric Membership Corporation, a nonprofit coöperative or electric membership corporation; that the rates charged by said coöperative are higher than those charged by the Franklin Power and Light Company; that said power and light company serves some of petitioner's neighbors; that at times there are interruptions in the service furnished to petitioner by the said membership corporation; that petitioner desires to obtain electric current from said power and light company and on numerous occasions has requested said company to furnish him, but that said company has advised petitioner that it had a contract or agreement with the said coöperative or with the Tennessee Valley Authority, by which neither the coöperative nor the power and light company would serve customers now being served by the other. Petitioner avers that said contract, if one exists, is contrary to public policy and that the same has not been approved by the Railroad and Public Utilities Commission; that said power and light company is able to furnish his power needs; and that its

refusal to do so is a discrimination against him.

There is also filed, as Exhibit "A" to the petition, a petition addressed to the Commission signed by twenty-four residents of Myles Manor subdivision, asking the Commission to order said power and light company to serve their electric needs, since the power company's rates are alleged to be lower than the coöperative's rates. Lance and the other petitioners are customers but not members of the coöperative.

The answer of defendant Franklin Power and Light Company admits that it is a public utility, subject to the jurisdiction of the Commission; that it serves the town of Franklin and some territory adjacent thereto; that under a contract, dated May 15, 1939, by and between the Tennessee Valley Authority and said power company, approved by this Commission on October 23, 1939, Par. 6 thereof provides that "the company (Franklin Power and Light Company) agrees that it shall in no event offer service in any locality now served by the Tennessee company (the Tennessee Electric Power Company)"; that under this contract the Franklin Power and Light Company purchased current from the Tennessee Valley Authority; that it has adhered to said contract and desires to continue to do so; that at the time of the signing of the former contract the petitioner Lance was served by the Tennessee Electric Power Company and that subsequently the property of the said power company was acquired by the said coöperative; that the above-quoted clause in the contract was reasonable and designed to protect the properties acquired or proposed to be acquired by the Tennessee Valley Authority from the Tennessee Electric Power Company to sell to the coöperative, which also purchased and now purchases electricity from the Tennessee Valley Authority; and that the said Franklin Power and Light Company was justified in its refusal to serve petitioner Lance because of this said contract, same having been approved by this Commission.

At the hearing an appearance was entered for the Middle Tennessee Electric Membership Corporation by its attorney but no intervention was made by it.

After the organization of the Tennessee Valley Authority, a government agency, and after electricity furnished by the authority was available, it became possible for the Franklin Power and Light Company, by purchasing power from the Tennessee Valley Authority and agreeing to resell it on standard Tennessee Valley Authority resale rates, to purchase power much cheaper and therefore resell it to its customers, the citizens of Franklin, at a greatly reduced rate. Consequently, the purchase of power from the Tennessee Electric Power Company or generation by operating the steam plant became impracticable, and the Franklin Power and Light Company negotiated a power purchase contract with the authority and on May 15, 1939, entered into such contract. Upon a hearing this Commission approved the contract, since it appeared in the public interest and since it enabled the Franklin Power and Light Company to successfully operate its plant and to resell electricity on base Tennessee Valley Authority rates, which are the lowest electric rates in existence in the state of Ten-

nessee now. It further appears that this contract is the standard Tennessee Valley Authority contract and that since it has been in effect it has saved the citizens of Franklin many thousands of dollars in reduced electric rates.

By a contract dated the 12th day of May, 1939, the Tennessee Electric Power Company, which company prior to that time had served the petitioner Lance and the other parties set out in Exhibit "A," entered into a contract whereby it agreed to sell to the Tennessee Valley Authority and a number of towns and rural electric coöperatives all of its facilities in Tennessee. In the subsequent conveyance the Tennessee Valley Authority retained the transmission lines and generating facilities, and the towns and coöperatives purchased the respective parts of the distribution system. The Middle Tennessee Electric Membership Corporation purchased that part of the rural distribution system formerly operated by the Tennessee Electric Power Company outside the town of Franklin and in Williamson county, Tennessee. The coöperative is now purchasing its electricity from the Tennessee Valley Authority at the same rates and under practically the same contract as the Franklin Power and Light Company.

In turn, the coöperative is reselling the power to its customers on the standard Tennessee Valley Authority resale rates. These rates are the same as those of the power company, except that the coöperative, being organized principally to serve rural areas, adds to the standard Tennessee Valley Authority rates an amortization charge of one cent per kilowatt hour on each kilowatt hour used by its members up to the first 100, in order to pay off indebtedness incurred in the purchase of its distribution system. This amounts to a minimum charge of 25 cents per month or a maximum charge of one dollar per month from its member customers as an amortization fee. To persons or customers being served by it who do not become members, including Lance and the other petitioners in this case, it charges the old rates in effect at the time the distribution system was operated by the Tennessee Electric Power Company, as it is authorized to do by Chap. 227 of the Public Acts of 1939. The act provides that: "The rates to be charged such nonmember customers shall not exceed the rates they were being charged at the time said electric facilities were acquired by the electric membership corporation."

It appears from the testimony that after the transfer of the property from the Tennessee Electric Power Company to the coöperative and in the adjustment of the exchanged properties, there were some interruptions of service which caused annoyance to the petitioners. Lately the service of the coöperative has improved, according to the evidence, but not to the entire satisfaction of the petitioners.

It further appears that Myles Manor subdivision, where petitioners reside, is served in the main by the coöperative as a result of its purchase of the lines involved from the Tennessee Electric Power Company. However, some of the customers on the north side of the subdivision loop are served by the Franklin Power and Light Company by a line extending from its service lines to the Dortch Stove

Works. There is an irregular dividing line between the areas served by the coöperative and by the power company, this line being established by the Tennessee Electric Power Company and the Franklin Power and Light Company before the creation of the coöperative. It appeared to the Commission at the time of the hearing that the establishment of a definite boundary line would be in the public interest. Accordingly, the Commission suggested a conference for the purpose of working this out. But the conference did not accomplish this result, since it appeared that there would be extreme difficulty in transferring customers from the power company to the coöperative and vice versa.

The Middle Tennessee Electric Membership Corporation is a general welfare nonprofit coöperative, formed under Chap. 231 of the Public Acts of 1937 and converted and now operating under Chap. 176 of the Public Acts of 1939, which act provides for the formation of coöperative, general welfare, membership corporations for the purpose of supplying electric energy and promoting and extending the use thereof. Sections 29 and 30 of the latter act provide:

"Section 29. *Exemption from Taxes.* Be it further enacted, that nothing in this act contained shall be construed to exempt coöperatives and foreign corporations transacting business in the state pursuant to this act from ad valorem property taxes, and assessment schedules for such property shall be filed with the Railroad and Public Utilities Commission, and the payment of such taxes shall be in lieu of all other taxes of every kind or nature whatsoever unless it is otherwise specifically provided by law that such other tax or taxes shall be applicable to coöperatives formed or foreign corporations transacting business pursuant to this act.

"Section 30. *Exemption from Jurisdiction of the Railroad and Public Utilities Commission.* Be it further enacted, that coöperatives and foreign corporations transacting business in this state pursuant to this act shall be deemed to be general welfare coöperatives and nonutilities, and, except as provided in § 29 of this act, exempt in all respects from the jurisdiction and control of the Railroad and Public Utilities Commission of this state."

Accordingly, the Railroad and Public Utilities Commission has no jurisdiction over the coöperative of this case except to assess it for taxes.

It further appears from the testimony that any person served by the coöperative and desiring to do so may become a member of the coöperative and be served on the existing Tennessee Valley Authority standard rates, plus the amortization charge. Each person becoming a member of the nonprofit coöperative in turn owns a share of the coöperative. An examination of the statutes reveals that there is no personal liability on a member other than the membership fee, which in the case of this coöperative is $10.

Under the conditions involved in this case, it should be emphasized that the electric energy rates of members of the Middle Tennessee Electric Membership Corporation are exactly the same as those of customers of the Franklin Power and Light Company. Furthermore, the petitioners, by becoming members of the coöperative, could avail themselves of the lower

rates for members instead of the higher rates for nonmember customers. If the application of the petitioners were granted by this Commission, they would not be able to secure power cheaper from the company than they could from the coöperative which now serves them. Instead, they would simply be relieved from a reasonable amortization charge by the coöperative, which charge is not for electric power but for debt retirement on distribution facilities in which each member of the coöperative has an ever-increasing equity. On the other hand, the customers of the private company have no equity in its property and therefore pay no amortization charge for debt retirement. In effect, the application of the petitioners does not represent an attempt to secure lower electricity rates but rather an unwillingness to join a coöperative and to pay their pro rata share on a coöperative property purchase. There is here presented a case of aversion against participation in a program of rural electrification which has demonstrated its benefits throughout Tennessee and other parts of the country.

Coöperatives in Tennessee distributing TVA power have followed the policy of liquidating their long-term obligations to the TVA and to the Rural Electrification Administration through added amortization charges to customers. When these charges are collected they are applied to the redemption of serial bonds or are transmitted periodically to creditors. Credits for the receipts are made to: (a) an individual membership account where the equity of the member is required to be accounted for separately; (b) contributed capital for the retirement of debt where customers do not acquire individual equities; and (c) other income when the collections are for the retirement of debt incurred prior to the beginning of service from TVA. The Commission feels that this policy is equitable and sound.

The program of this coöperative is a part of the general program in the state by which electricity is being made generally available to all rural sections of the state, and through this program the percentage of rural customers now served has been very greatly increased since the inauguration of the program.

[1] The Commission approved the contract of May 15, 1939, between the Tennessee Valley Authority and Franklin Power and Light Company. It appeared at that time that the contract was in the public interest, and since that time the contract has actually resulted in large savings to the customers and residents of Franklin, Tennessee, in electric rates. The contract prohibited the Franklin Power and Light Company from serving the petitioner or any of the parties set out in Exhibit "A" (since they had previously been served by the Tennessee Electric Power Company), and the Commission is of the opinion that it should not now disturb the contract.

[2] It has long been the public policy of the state of Tennessee to prevent unwarranted competition between operating utilities within the state. The legislature gave sanction to this policy by its enactment in 1923 of a statute prohibiting public utilities from the operation of services already being furnished by other public utilities. Acts of 1923, Chap. 87; Code of 1932, §§ 5502–5508. This statute provides:

"No public utility shall establish or

begin the construction of, or operate any line, plant, or system, or route in or into a municipality or other territory already receiving a like service from another public utility, or establish service therein, without first having obtained from the Railroad and Public Utilities Commission, after written application and hearing, a certificate that the present or future public convenience and necessity require or will require such construction, establishment, and operation, and no person or corporation not at the time a public utility shall commence the construction of any plant, line, system, or route to be operated as a public utility, or the operation of which would constitute the same, or the owner or operator thereof, a public utility as defined by law, without having first obtained, in like manner, a similar certificate; provided, that this section shall not be construed to require any public utility to obtain a certificate for an extension in or about a municipality or territory where it shall theretofore have lawfully commenced operations, or for an extension into territory, whether within or without a municipality, contiguous to its route, plant, line, or system, and not theretofore receiving service of a like character from another public utility, or for substitute or additional facilities in or to territory already served by it."

Such a public policy and such legislation were a necessity to protect the public from overlapping competitive conditions. Orderly development of utility services through recognition of territorial rights throughout the state became a possibility and a reality as a result of this policy and this statute. Identical electric rates never existed between companies rendering electric service in the state. At the territorial boundaries between these companies were frequently found neighbors served by two different companies and upon two different rate structures. The agreement described in this record in the answer of the defendant simply gives continuing effect to this policy, and in doing so preserves orderly relationships between distributors of electricity in the state, whether these distributors be private corporations or public agencies. If two public utilities were involved in such a controversy as this, the Commission would deny the petition, since if it were granted there would be a tendency to lapse into competitive ways in which the laws of the jungle alone would prevail and the public would be the ultimate sufferer.

In accordance with statutory provisions already cited, this Commission has no jurisdiction over electric membership coöperatives and the statutes under which they are established specifically provide that these bodies are nonutilities. But this should not deprive them of the protection afforded by §§ 5502–5508 of the Code of 1932, nor of the public policy to which this enactment gave expression. The area in which these petitioners reside is one which should normally and properly belong to the territory of the coöperative. Fortuitous circumstances alone caused the Franklin Power and Light Company to render domestic service along the fringe of the territory of the coöperative to four isolated customers, each of whom was served from a line whose chief function was service to an industrial plant, Dortch Stove Works.

There is no reason why the Commission should go out of its way to

disturb the relationship existing between the company and these four customers. However, for future service, as new homes are established in this particular area, a policy should be adopted by the company that recognizes the territorial rights of the coöperative in this area. The Commission is satisfied that this will be the attitude and the policy of the company, judging from its expressed attitude in the record of the instant case.

Much has been said by uninformed persons about invasion of the territory of existing distribution companies by various agencies representing the Federal government. This Commission, which has been in a position to follow closely the growth of the public power movement in Tennessee, knows that the TVA and the REA have scrupulously followed, both in letter and in spirit, a policy of refusing to enter fields of competition with private companies adequately rendering service in this state. In order to avoid direct competition these agencies have financed the purchase of existing private facilities to make possible an integrated and efficient public system. The report of the Rural Electrification Administration for the year 1939 states:

"Such purchases are incidental to the essential purpose of reaching unserved persons and are deemed an appropriate means to that end. In all of such instances a considerable number of farmers and other residents of rural areas would have no prospect of electric service unless such existing facilities were incorporated in the coöperative project. A collateral advantage of such purchases, although not the reason for them, is the fact that the business along such existing lines is usually attractive. Such 'cream' areas, when incorporated within a new and larger rural project, can be averaged with 'thin' areas which in themselves would not be self-liquidating, and which otherwise might be excluded from electric service for a long time."

Since this is the policy followed uniformly in this state by public distribution agencies of electricity, there is an additional obligation upon privately owned utilities and upon this Commission to impose similar restrictions against tendencies of unbridled competition.

In a former case involving a territorial controversy between a private company and an electric coöperative, Re West Tennessee Power & Light Co. (1937) 18 PUR(NS) 369, 372, this Commission declared:

"It appears, upon all the facts adduced at the hearing, that there is a grave probability that the authorization of the three proposed extensions of the West Tennessee Power & Light Company would seriously injure the program of the Southwest Tennessee Electric Membership Corporation. It would not only deprive this corporation of certain customers which it already has under contract, but in doing so it would increase the difficulty of extending service to other proposed customers who reside slightly further on and are proposed to be served by the coöperative, and would render the cost of furnishing service to certain groups uneconomical and prohibitive.

"Under this showing it would appear that the greater good to the greater number would be best served by denying to the power company the authority to construct the lines petitioned

for even though this denial may temporarily embarrass some of the prospective customers who would immediately obtain electric service otherwise."

These same principles are properly applicable in the present case. The Commission is of the opinion that it would not be good public policy, nor in the public interest, for it to order a public utility under its jurisdiction to serve a customer already being served adequately by a coöperative not under its jurisdiction. Such a decision would establish a precedent which would seriously injure the program of rural electrification being carried on in the state of Tennessee and all over the United States under the Rural Electrification Administration. It would not be in the public interest for the Commission to interfere with this program or to handicap it in any way. If the Franklin Power and Light Company were ordered to serve petitioners, they would be able to "save" only the small sum amounting to the amortization fee charged each month by the coöperative. This would not justify the Commission in establishing a dangerous precedent which might result in unnecessary duplication of service and economic waste and which might hinder the program of rural electrification being carried on throughout the state.

It is therefore *ordered* that the petition for an order requiring the Franklin Power and Light Company to furnish applicants with electric and power needs be, and the same is hereby, denied.

NORTH DAKOTA PUBLIC SERVICE COMMISSION

Re Central Light & Power Company

[Case No. 3802.]

Valuation, § 155 — Overheads — Electric utility.

1. Overhead costs of an electric utility amounting to 25 per cent of total construction cost were held to be excessive, p. 109.

Valuation, § 202 — Unused property — Plant and structures.

2. Parcels of land and a structure formerly used by an electric company as a production plant but no longer so used should be excluded from the rate base as property not used or useful in the rendition of public utility business, p. 110.

Evidence, § 3 — Judicial notice — Cost of franchises and consents.

3. The Commission can take judicial notice of the fact that many towns paid a utility to extend its services to them, p. 110.

Valuation, § 327 — Franchises and consents.

4. Claims for franchises and consents should be disallowed in determining the rate base of an electric company when it is not shown that expenditures for these items have been charged to plant account or paid out of operating expenses, particularly in view of the fact that many towns pay the utility to extend its services, p. 110.

Valuation, § 143 — Organization costs — Merged organizations.

5. Organization costs of a corporation merged into another corporation should not be retained on the books of the new company, and such costs should be eliminated from the rate base, particularly when there is a lack of proof as to such costs, p. 110.

Depreciation, § 13 — Basis —Revenues — Depreciable property.

6. Depreciation accruals should be based on depreciable property instead of operating revenues, p. 111.

Depreciation, § 32 — Straight-line method.

7. The better method of calculating annual depreciation accruals is straight-line depreciation accounting, p. 111.

Depreciation, § 51 — Electric utility.

8. An electric utility was required to compute annual depreciation on a 4 per cent straight-line basis, p. 111.

Depreciation, § 14 — Basis — Historical cost.

9. Annual depreciation expense allowance on the straight-line basis should be computed on the historical cost of depreciable property, as any other basis would be an illusionary and fluctuating standard, p. 111.

Valuation, § 90 — Accrued depreciation — Necessity of deduction.

10. The rate base should be a depreciated figure when allowance is made in operating expenses for annual depreciation on the straight-line basis, p. 111.

Depreciation, § 1 — Definition.

11. Depreciation is the loss in service value, not restored by current maintenance, incurred in connection with the consumption or prospective retirement of the utility plant in the course of service from causes which are known to be in operation and against which the utility is not protected by insurance, p. 111.

Valuation, § 333 — Going concern value.

12. An electric utility which is a going operating public utility must be valued for rate making upon that basis, p. 113.

Valuation, § 331 — Going concern value — Burden of proof.

13. A company claiming a separate allowance for going concern value must furnish convincing proof thereof, p. 113.

Valuation, § 347 — Going concern value — Proof — Development cost.

14. A calculation of the amount of going concern value based on expenditures of time and expense by the company in the development of its business and deficiency in net earnings in the early years of the company, without evidence as to whether the cost has been paid for in prior years out of operating expenses, is unconvincing and not a foundation for going concern value, p. 113.

Valuation, § 300 — Materials and supplies.

15. A public utility should be allowed to earn a return on the investment it must make in materials and supplies which must be kept on hand for the ordinary conduct of its operations, p. 113.

Valuation, § 289 — Cash working capital — Definition.

16. Cash working capital is that amount of money necessary to finance the

ordinary operation of the utility during the rendering of service and before payment for such service is made, p. 113.

Valuation, § 296 — Cash working capital — Relation to operating expenditures.

17. The necessary cash working capital of an electric utility was ascertained by taking six weeks of average operating expenditures where a lag of about six weeks would exist between expenditures and reimbursments, p. 113.

Valuation, § 250 — Contributions in aid of construction.

18. The amount of money contributed to a public utility company by customers for the purpose of construction should be excluded in determining the rate base, p. 114.

Expenses, § 70 — Maintenance and replacements — Property paid for by customers.

19. Expense of maintenance and depreciation should be allowed as an operating expense in connection with property constructed by contributions of customers, where the property so constructed belongs to the company and the company is charged with the cost of maintenance and replacements, p. 114.

Valuation, § 30 — Measures of value — Historical and reproduction cost.

20. Historical cost and cost of reproduction, together with all other elements, must be considered in determining fair value for rate making, p. 114.

Return, § 87 — Electric utility.

21. A return of 6 per cent was held to be adequate for an electric utility in view of the present money market, the yield of corporate bonds and stock, the yield of government bonds, and interest rates in the utility field, p. 115.

[December 30, 1940.]

INVESTIGATION *of rates of electric utility; no justification found for lowering present rates.*

By the COMMISSION: The above-entitled matter came on for hearing before the Commission, pursuant to good and sufficient notice mailed to all interested parties, at 10 o'clock A. M., October 4, 1940, at Harvey, North Dakota, at which time and place the following appearances were entered:

James M. Hanley, Bismarck, appearing as Commerce Counsel for the Public Service Commission of the state of North Dakota; W. A. Smith, Dubuque, Iowa, appearing as Attorney for the Central Light & Power Company; Herman J. Herzog, Chicago, Illinois, appearing for the Central Light & Power Company; Perry Wahl, Harvey, appearing for the Central Light & Power Company; J. W. Campbell, West Union, Iowa, appearing for the Central Light & Power Company; Ray Clark and Atlee Tanner, Fessenden, appearing for the city of Fessenden; L. B. Molander, Harvey, appearing as Mayor of the city of Harvey; G. N. Nelson, Harvey, appearing in behalf of the city council of Harvey; H. T. Hirsch, Anamoose, appearing for the city council of Anamoose; Victor V.

Stiehm, Drake, appearing for the city of Drake; Helmuth Eckart, Martin, appearing as Mayor of Martin; Robert W. Carlson, Chief Engineer, and Albert V. Hartl, Chief Accountant, appearing for the Public Service Commission, Bismarck.

These proceedings were instituted by the Commission on its own motion for the purpose of ascertaining the reasonableness and justice of rates and charges for electric service furnished by the respondent and for the further purpose of determining the value of the property used and useful in the production and distribution of electrical energy.

The Central Light & Power Company is an electric public utility company organized and existing under and by virtue of the laws of the state of Delaware. It furnishes electric service in its Garrison division to Underwood, Coleharbor, Max, and Garrison. In its Harvey division, it furnishes such service to Cathay, Emrick, Fessenden, Harvey, Manfred, Hamberg, Martin, Anamoose, and Drake. All of the said points are within North Dakota. The company has no physical connection with any other electric utility. It has approximately 122 miles of transmission line and about 2,320 customers.

A detailed inventory, appraisal, and audit of the company was made by the Commission staff pursuant to a resolution of the Commission. The valuations were served upon the company prior to the time set for the hearing. The inventory and appraisement were made as of August 31, 1939, and subsequently brought down to July 1, 1940, by an inventory and appraisement of addition between those dates.

Valuation

Mr. Robert Carlson, chief engineer of the Public Service Commission introduced in evidence Exhibit 1, which is an inventory and historical cost appraisal of the physical property of the company used and useful as of August 31, 1939. Exhibit No. 2 brings down to July 1, 1940, the inventory and appraised value of the property of the company, and likewise contains a summary of historical cost and cost of reproduction together with depreciation schedules.

The utility introduced in evidence Exhibit No. 5, which is comparable to Exhibit No. 1, and constitutes an inventory and historical cost appraisal of the company. Exhibit 6 is an exhibit of the company showing the cost of reproduction new less depreciation as of August 31, 1939. The company offered no evidence as to net additions since that date.

The summary of Exhibits Nos. 1 and 2 shows the following:

Historical Cost as of August 31, 1939	$834,010
Net Additions to July 1, 1940	5,368
Total Historical Cost	$839,378
Cost of Reproduction as of August 31, 1939	$955,407
Net Additions to July 1, 1940	5,368
Total Reproduction Cost	$960,775

Overheads

[1] The Commission engineer testified that the records of the company showed an overhead cost in the construction of the Harvey plant, which was built in 1930, of $55,000. He testified that this amounted to approximately 25 per cent of the total construction cost and considered this amount to be excessive, and therefore reduced in his calculations as to cost

the overhead cost by an amount of $12,000. The testimony further shows that the entire amount of $55,000 was not paid to the management and engineering company but probably includes all of the expenses of the company which are properly classified as overheads during the constructions. The witness did not question the payment but merely criticized the amount thereof.

In the case of the construction of the production plant at Garrison, the total cost was $110,000. The company carries on its books an overhead expenditure of $28,000. Engineer Carlson reduced this amount by $4,000, leaving a total of $24,000. This was done upon the same reasoning as in the case of the Harvey plant, and upon the ground that the overhead costs were out of proportion with the cost of the plant.

The Commission finds that the overhead cost of $55,000 in the construction of the Harvey plant and an overhead cost of $28,000 in the construction of the Garrison plant are excessive, being more than a justifiable percentage of the entire construction cost. The company made no attempt to justify the expenditures.

The Commission, therefore, will allow as overhead at these two plants the sum of $43,000 for the Harvey plant, and the sum of $24,000 for the Garrison plant.

Investment and Fund Accounts

[2] The utility through Witness Herzog claimed an item of $3,599 new and $2,311 less depreciation under the heading "Investment and Fund Accounts." The witness admitted that these items covered investment in several parcels of land and a structure formerly used as a production plant but no longer so used. The property covered by these items is not used or useful in the rendition of public utility business and will be disallowed. In this position the witness of the company agreed.

Intangible Plant

[3–5] The utility also claims $8,000 for "Organization" and $4,383 for "Franchises and Consents." Neither of these figures is depreciated in the company's exhibit. The witness stated that these items covered the cost of obtaining certificates, fees and expenditures for incorporation, fees and expenditures for mergers, office expense incident to organization of the utility. He stated that he had found no actual cost figures to support such items. He stated that the item of $8,000 was an estimate based upon organization costs of somewhat similar utilities. As to the item of $4,383 he stated that that was an estimate of what should have been spent in time and expenses of company officials and employees in securing franchises and consents in the various communities served. He stated that the estimate was based upon statements of individuals in the corporation who took part or were able to recall such time and expense expended.

The witness admitted that he had never had any experience in the organization or development of utility companies in North Dakota, that he did not know the fees charged by the state, cities, or lawyers in North Dakota. As to the expenditures for franchises and consents the witness was unable to state whether such expen-

ditures had been paid for out of the operating expenses of the company and stated that if they were allowed under this item that then they should be so deducted and that he had made no such deduction. A good deal of the attempted justification for these costs was that there are difficulties in securing franchises and the larger the city the greater the difficulty because of the greater number of people to satisfy. As a matter of fact it is common knowledge, and a fact that this Commission can take judicial notice of, that in North Dakota, many towns pay the utility to extend its services to it. The difficulty is generally on the other side and any cost that there might be is paid for by the city.

The records of this utility on file with the Commission, which were stipulated as part of this record, show that the present company was not the original company and any organization there might be is barred in the various transfers of the original company to the present one. Public Utility Commissions generally hold that organization costs of a corporation merged into another corporation should not be retained on the books of the new company. In addition the claim for these items is too speculative and the proof lacking in probative value. The items will be disallowed.

Accrued Depreciation

Commission Exhibit No. 2, on page 12, shows the historical cost less depreciation with net additions to July 1, 1940. This is tabulated as follows:

Historical cost with net additions	$839,378
Depreciable property	829,983
Accrued depreciation	116,389
Depreciated value	722,989

The cost of reproduction less depreciation with net additions to July 1, 1940, is as follows:

Cost of reproduction with net additions	$960,775
Depreciable property	950,875
Accrued depreciation	127,815
Depreciated value	832,960

In determining the accrued depreciation, neither real estate nor the net additions to July 1, 1940, were considered, the first because of statute and the second because of the recent installation are considered in 100 per cent condition.

Statute

Section 4609c37 of the Compiled Laws of the state of North Dakota, 1935, specifies certain items to be found by the Commission in determining fair value of the property of a public utility. They are as follows:

Subsection (a) Land	$10,200
Subsection (b) and (c) (See Exhibit No. 1)	
Subsection (d) Reproduction cost as of July 1, 1940, less land	$950,575
Subsections (e) and (f)	
Reproduction cost as of July 1, 1940, less land	$950,575
Depreciation	127,815
Depreciated cost of reproduction less land	$822,760
Subsection (g) (See below)	

Depreciation

[6–11] Exhibit No. 3 shows a condensed income statement for the twelve months ending July 30, 1940. These figures were taken from the books of the company. The company set aside during that year as "Provision for retirement" the sum of $6,283.99. This item is the same as referred to by the witnesses as annual accrual for depreciation expense. The company, up to the present time, has determined

its annual depreciation accrual at a rate of 5 per cent of operating revenues. This method and percentage have failed to provide for the actual retirements which have been made by the company.

The better method of calculating annual depreciation accruals is straight-line depreciation accounting, which should be determined in this case upon a basis of 4 per cent per annum of the original cost of the depreciable property. This figure as of the time of the hearing would amount to $33,200.

The failure to provide for adequate depreciation expense results in either deterioration of the property or borrowing from other funds or outside sources in order to secure the funds necessary to keep the property in operating condition.

The Commission recommends, therefore, that the company establish its accounting for depreciation upon the straight-line method and use, as a basis, 4 per cent as the composite depreciation rate.

In line with the above findings and from a study of Exhibit 3 and other pertinent material contained in the testimony, the Board finds that an annual depreciation expense allowance of 4 per cent will compensate the utility for all factors of depreciation existing in its property. This percentage is arrived at by computing composite figures for all plant accounts. The depreciable property is tabulated by individual accounts and average life figures are set up for each class. The annual rate is then applied to each account and the result is the annual accrual. The total annual accrual for each department is then determined and this figure divided by the depreciable property figure resulting in the average annual rate of 4 per cent. The total annual depreciation expense allowance will be computed on the historical cost basis of the depreciable property by applying to such historical cost the rate referred to. This will result in a calculation of 4 per cent applied to the historical cost less land with net additions to July 1, 1940; or a total depreciable property of $829,983 and an annual depreciation expense of $33,200.

The same factors which cause annual depreciation are also responsible for the accrued depreciation or accrued loss in service value. Consequently, if it is necessary and proper to make allowance in operating expenses for annual depreciation, the same reasoning would indicate that the rate base should be a depreciated figure.

As applied to a depreciable utility plant, depreciation is the loss in service value not restored by current maintenance and incurred in connection with the consumption or prospective retirement of the utility plant in the course of service from causes which are known to be in operation and against which the utility is not protected by insurance. Sound, consistent accounting would indicate that such depreciation must be computed on historical cost of the property. Any other basis would be an illusionary and fluctuating standard. The purpose of the annual accruals for depreciation is to replace by money physical property of the company used in the public service, and if additional funds are needed to replace the depreciated physical property with other physical property in order to maintain a going

plant, then such additional funds must come by way of additional investment from the owners.

For these reasons, this Commission in its computation of annual depreciation expense, and in its deduction for accrued depreciation will proceed from an historical cost base.

Going Concern Value

[12–14] The utility here under investigation is a going operating public utility and the final fair value of the property of the company must be upon that basis.

Mr. Herman J. Herzog in testifying on behalf of the utility, made a claim of $25,000 as a separate item for going concern value.

It is incumbent upon the company claiming a separate allowance for going concern value to furnish convincing proof thereof. St. Joseph Stock Yards Co. v. United States (1936) 298 US 38, 80 L ed 1033, 14 PUR (NS) 397, 56 S Ct 720. Mr. Herzog testified that he calculated the figure at $25,000 for going concern value from expenditures of time and expense by the company in the development of its business and deficiency in net earnings in the early years of the company. He was unable to state as to whether or not the cost of the development of the business had been paid for in prior years out of operating expenses, and produced no evidence, figures or facts that they had not been paid for thus. He had no knowledge as to whether or not there were deficits in the early years of the company, what the rates were, or the number of customers.

Such evidence as was given to substantiate a separate item for going concern value has no foundation and is unconvincing. The company has not sustained the burden of proof on this item and it will be disallowed. See Driscoll v. Edison Light & P. Co. (1939) 307 US 104, 83 L ed 1134, 28 PUR(NS) 65, 59 S Ct 715; Public Utility Comrs. v. New York Teleph. Co. 271 US 23, 70 L ed 808, PUR1926C 740, 46 S Ct 363; Galveston Electric Co. v. Galveston, 258 US 388, 66 L ed 678, PUR1922D 159, 42 S Ct 351.

Materials and Supplies

[15] It is proper that the utility be allowed to earn a return on the investment it must make in materials and supplies which must be kept on hand for the ordinary conduct of its operations. Commission Accountant Hartl recommends a figure of $7,500, which is an average of the last three calendar years. It appears from the records and testimony that an allowance of $7,500 for materials and supplies is a proper allowance based upon past experience and will be allowed for future operations.

Cash Working Capital

[16, 17] Cash working capital is that amount of money necessary to finance the ordinary operation of the utility during the rendering of service and before payment for such service is made. The testimony in this case would indicate that a lag of about six weeks between expenditures and reimbursements exists in the case of this utility. The necessary cash working capital is ascertained by taking six weeks of average operating expenditures.

From such calculations the Com-

mission finds that an allowance of $9,000 for cash working capital will be sufficient for future operations.

Contributions in Aid of Construction

[18, 19] The company carries on its books a figure of $1,655.15, which is labeled "contributions in aid of construction." Mr. Hartl testified that no part of this amount has been refunded to the utility customers contributing the same. The amounts making up this fund are composed of moneys contributed to the company by customers for the purpose of construction. The stockholders of the company have not in these instances advanced their own funds for these purposes, and therefore such funds should be excluded in determining the rate base upon which the utility is entitled to earn a return.

It appears to the Commission that it is manifestly unfair and discriminatory as to other ratepayers to permit a utility to collect a return from the public upon money contributed by other than the owners of the property. To permit such return would be to allow the company to collect funds for construction and then to secure from the public a return on the value of that property. The Commission finds that the item "Contributions in Aid of Construction," should be deducted from the value of the property in determining the rate base.

In view of the fact, however, that the property constructed by such contributions belongs to the company and the company is charged with the cost of maintenance and replacements, the inclusion of expense of maintenance and depreciation in the operating expenses of the company will be allowed.

Fair Value

[20] In determining fair value all elements must be considered. It is a determination of what, under all the facts and circumstances of the case, is a just and equitable amount on which the return allowed the corporation is to be computed. This Commission has consistently followed the rule laid down in Smyth v. Ames (1898) 169 US 466, 42 L ed 819, 18 S Ct 418, requiring that historical cost and cost of reproduction be considered and given due weight. In this decision we have weighed them together giving to each such weight as in our judgment is necessary and proper to arrive at a fair value of the property of this utility as a going and operating electric public utility.

In keeping with these principles, the Commission has in its judgment weighed the historical cost and the cost of reproduction undepreciated, and giving due consideration to the company as a going and operating utility, has arrived at a present fair value of the property of the company of $875,000.

Rate Base

The rate base is computed as follows:

Reproduction Cost with net Additions		$960,775
Historical Cost with net Additions		839,378
Fair Value		$875,000
Less:		
Accrued Depreciation	$116,389	
Contributions in aid of construction	1,665	118,054
Sub Total		$756,946
Add:		
Materials and Supplies	$7,000	
Cash Working Capital	9,000	16,000
Rate Base		$772,946

Operating Revenues and Expenses

The gross operating revenues, expenses, and net operating income before depreciation are as follows:

Gross Operating Revenues	$133,008.70
Gross Operating Expenses	93,179.40
Net Operating Income before Depreciation	$39,829.30

This company since 1935 has enjoyed a slow but steady increase in gross operating revenue and contrary to the general trend during the same period, the general expense of the company has decreased somewhat. The Commission therefore finds that the above revenue and expense figures can be safely projected into the future.

Rate of Return

[21] From a study of the present money market, the yield of corporate bonds and stocks, the yield of government bonds and interest rates in the utility field, the Commission finds that a 6 per cent return is an adequate return on the rate base shown herein. Upon that basis, the total revenue requirement of this utility to produce the above rate of return is as follows:

Gross operating expenses	$93,179
Depreciation (4% Depreciation on depreciable property)	33,200
6% Return on rate base	46,377
Revenue requirement	$172,756
Actual revenue	133,009
Annual deficit	$39,747

Actual Return on Rate Base

Actual Net Operating Revenue	$39,829
Less: Depreciation expense	33,200
Net Operating Income	$6,629

$6,629 ÷ $772,946 = 0.85 per cent (actual rate of return)

On the basis of such anticipated revenue requirement, as compared to the actual net operating income now being earned, we find that there is no justification for a lowering of the present rates of this utility.

And it is so *ordered.*

CALIFORNIA DISTRICT COURT OF APPEAL, SECOND DISTRICT, DIVISION I

LeRoy E. Carpenter et al.

v.

Los Angeles Gas & Electric Corporation

[Civ. 12085.]

(— Cal App (2d) —,106 P(2d) 916.)

Service, § 138 — Discontinuance — Accessibility of meters.

1. An electric company had a legal right to discontinue service to a customer, pursuant to its rules and regulations filed with the Commission, where the meter was so located that it could not be read properly and the customer refused to put the meter in an accessible location, p. 118.

Service, § 67 — Commission jurisdiction — Reasonableness of rules.

2. The reasonableness of a utility's rules and regulations with respect to its service is a question for the Commission's determination, and where the Commission has expressly or impliedly approved such rules and regulations they may become binding on the trial court in suits for damages incurred by reason of the discontinuance of electric service, p. 118.

Procedure, § 41 — Instructed verdict — Lack of evidence.

3. The trial court is duty bound to grant a motion for an instructed verdict in favor of defendant where there is no substantial evidence to support a verdict for plaintiff, when every reasonable and legitimate inference which might be drawn from that evidence, whether conflicting or not, was indulged, p. 118.

Appeal and review, § 8 — Denial of new trial — Right to appeal.

4. No appeal lies from an order denying a motion for a new trial, p. 119.

[November 6, 1940.]

APPEAL *from judgment for defendant and order denying motion for new trial in action for damages for discontinuance of electric service; affirmed.*

APPEARANCES: Robert R. Ashton, of Los Angeles, for appellants; LeRoy M. Edwards, T. J. Reynolds, and Neil G. Locke, all of Los Angeles, for respondent.

PER CURIAM: This is an appeal from a judgment for defendant upon a verdict of the jury directed by the court, and an attempted appeal from an order denying a motion for a new trial.

The action is one in which plaintiffs seek damages, both general and punitive, for the alleged wrongful, unlawful, and malicious discontinuance of electrical service at plaintiffs' home which theretofore had been supplied by defendant.

From the evidence adduced at the trial, which consumed four days, it appears that early in 1934 plaintiffs questioned the truth of defendant's monthly statement on account of electricity shown by the meter to have been used. A letter from plaintiffs to defendant in that regard, under date of February 5, 1934, is as follows: "Dear Sirs: Received your sheet showing the electric readings requested. Now, please advise how you obtained these. There is no way to secure them except by admittance to the house, and no one has asked to be allowed to enter for that purpose. During six weeks of the time shown, the house was unoccupied, and we were out of the city. Yours very truly, L. E. Carpenter." A second letter under date of February 19, 1934, is as follows: "Dear Sirs: Enclosed is check for gas as per your bills of Jan. 6.89—Feb. 6.13, 13.02. Under date of Feb. 5, I wrote you concerning the electricity, asking an explanation—You have not answered that letter. I am withholding payment until you straighten this matter out as it should be. Yours truly, L. E. Carpenter."

In reply to the above letters defend-

ant informed plaintiff in a letter dated March 6, 1934, that its assistant chief meter reader reported that the meter could be read through the window. Thereafter it appears that other meter readers reported to the contrary. In any event, the dispute over the meter readings continued for over a year.

Briefly, the record reveals evidence of the following pertinent facts: That the meter was located on the screen porch; that the screen door was covered with a canvas on the inside; that the door was always locked; that time and again the defendant's meter readers were required to return by special appointment or otherwise to gain access to the meter; that the Board of Public Utilities and Transportation investigated the matter at the request of defendant; that plaintiff protested the investigation and questioned the Board's authority; that considerable correspondence regarding the accounts and the payment thereof and to the controversy generally went on between plaintiffs and defendant; that defendant endeavored to get the meter moved outside or to an accessible spot; that plaintiffs had withheld the payment of their account repeatedly; and finally, that defendant, after due notice and although all accounts were paid, shut off the electricity on February 28, 1935.

Plaintiffs' complaint contains the allegation that "the only reason given by said defendant corporation for disconnecting said electrical service after the same had been cut off, was that plaintiffs' account was too small and too *troublesome* to bother with." (Italics added.)

The defense was based on the claim by defendant that its rules adopted in accordance with law had been followed at all times in connection with its action in discontinuing electric service to plaintiffs.

The trial court, following the motion by defendant for an instructed verdict, summed up the law and facts in part as follows: "In a sense there was a dispute about something, running over a period of years; and I assume that there would be a dispute about something as long as the service was continued, in this case. When Mr. Carpenter questioned the amount of the bills, the company, as I understand the evidence, wrote off the amount that was in dispute. He questioned the accuracy of readings made through the screen. For a time it appears that someone connected with the defendant corporation contended that an accurate reading could be made through the screen, and thereafter, however, persons in authority conceded that the meter could not be properly read through the screen. Then Mr. Carpenter, as I understand his position, which has been very difficult for me to comprehend, when the representatives of the corporation finally definitely agreed, both verbally and in writing, that the meter could not be read through the screen, took the position, 'Well, you said it could, now you read it through the screen.' There was no dispute as to the amount of the bill that was pending. . . . We have definitely now in evidence the rules and regulations of the company. It appears from the evidence that those rules were on file with the Railroad Commission approximately fifteen years or thereabouts prior to this controversy. The mere long-continued period without question would appear to

be at least a tacit holding by the Railroad Commission that they were reasonable. . . . There is no issue of fact to be presented to the jury. It is undisputed that the rule was adopted. It was on file. . . . Notice was given in accordance with the rules. The basis for the application of the rule was the inability to read the meter under the conditions that existed and for which plaintiff contended for a year and still contends in his evidence. So that the case, as to the application of the rule, is made out by the plaintiff, himself."

[1] In connection with its instructions to the jury the court commented further, as follows: "There is no dispute as to the inability to read or properly read the meter. That is a point that plaintiff contended for. That was his first contention, that the meter had not been properly read. Therefore, it is undisputed that at times the curtain was drawn in such way that no reading at all could be had. There is, as I indicated, no issue upon that point. The plaintiffs contend that the meter could not be properly read. The representatives of the defendant corporation concede that the meter could not be properly read and at times read at all. Therefore, notice was given, either that the meter be placed in some accessible place or the service would be discontinued, which is without dispute; and it is without dispute that no change in the location of the meter was thereafter made. So, as a matter of law, the court is compelled to hold, on the undisputed testimony, that the defendant corporation had a legal right to discontinue the service; and when one acts legally, there is no cause of action." The foregoing comments by the trial judge are in accord with the record.

[2] That the rules and regulations as proved at the trial, under and by virtue of which defendant acted in the premises, were controlling and constituted a complete defense, there can be no question. No constitutional issue is involved with relation to such rules and regulations and the operation thereof as affecting the rights of the plaintiff. The reasonableness of such rules and regulations, as correctly pointed out by respondent, is a question addressed to the judgment of the governmental agency charged with the determination thereof—in this instance, the Railroad Commission of the state of California. That Commission having acted with regard thereto, either directly or by implication, as the evidence shows without contradiction, the rules became and were binding on defendant company. The reasonableness of such rules and regulations, in the circumstances, was conclusive on the trial court. Public Utilities Act, § 63(b) et seq., Stats. 1915, p. 159; Live Oak Water Users' Asso. v. Railroad Commission (1923) 192 Cal 132, 139, PUR1924B 790, 219 Pac 65; and to the same effect see, also, Truck Owners & Shippers v. Superior Court (1924) 194 Cal 146, 228 Pac 19.

[3] A review of the record discloses that in no event would the evidence have supported a verdict in favor of plaintiff as a matter of fact and as a matter of law. When, indulging in every reasonable and legitimate inference which may be drawn from the evidence and disregarding the fact, if it is a fact, that the evidence is conflicting, and when in such circumstances

the result is a determination that there is no evidence of sufficient substantiality to support a verdict in favor of plaintiff, it is then the trial court's plain duty to grant a motion for an instructed verdict. Thomsen v. Burgeson (1938) 26 Cal App(2d) 235, 79 P (2d) 136; Collins v. Nelson (1936) 16 Cal App(2d) 535, 61 P(2d) 479.

For the foregoing reasons the judgment is affirmed.

[4] No appeal lies from the order denying the motion for a new trial and the same is, therefore, dismissed.

MASSACHUSETTS DEPARTMENT OF PUBLIC UTILITIES

Mayor of City of Lynn

v.

Lynn Gas & Electric Company

[D.P.U. 5975, 6085.]

Rates, § 381 — Gas — Promotional — Competitive fuels — Form of rates.

1. A public utility company which has been experiencing difficulties because the bulk of domestic customers are convenience users served at a loss and because the company has been unable to meet prices charged for unregulated competitive fuels, under gas rate schedules which are not promotional in character, should be permitted to establish promotional rates with optional features for customers using gas for household and building heating and for commercial and industrial purposes, p. 120.

Depreciation, § 24 — Annual requirements — Obsolescence.

2. Depreciation charges for replacement of property may be made with some degree of accuracy, but with everyday improvements being made in the electric industry and the continual studies for improvements in the manufacture of gas the question of obsolescence in future years relative to both properties is of paramount importance and of serious consequence, p. 124.

Depreciation, § 23 — Necessity of adequate allowance.

3. Rate reductions brought about in part through a reduction in charges for depreciation, unless such charges are extremely excessive, would be contrary to sound regulation, as adequate reserves afford a protection to the investor in insuring his investment and at the same time benefit the consumer by limiting capital investment upon which dividends are paid, p. 124.

Expenses, § 109 — Contested tax claims.

4. An increased state corporate franchise tax assessed against a public

utility company should be allowed as an operating expense until a final determination thereon has been made, although the company has appealed the assessment, p. 125.

[December 4, 1940.]

COMPLAINT *against gas and electric rates and investigation by Department as to propriety of certain schedules of rates and charges for gas; rate reduction ordered for electric department, new gas rate schedules permitted to go into effect, and complaint dismissed.*

McKEOWN, Commissioner:

[1] On January 31, 1940, there was filed with the Department by the mayor of the city of Lynn a petition bearing date of January 30, 1940, which sought a reduction in the rates charged for gas and electricity sold and delivered by the Lynn Gas and Electric Company in said city (§ 93, Chap. 164, G. L., Ter. Ed.) D.P.U. 5975. On May 14, 1940, the company filed with the Department revised schedules of rates and charges for gas effective June 1, 1940. The Department entered upon an investigation as to the propriety of said rates and charges and by order, from time to time, suspended the use of the said rates and charges (D.P.U. 6085). The proposed schedules of rates and charges filed by the company for gas may be identified as follows:

M.D.P.U. No. 41, Schedule I, Regular Gas Rate
M.D.P.U. No. 42, Schedule J, Optional Promotional Household and Building Heating Gas Rate
M.D.P.U. No. 43, Schedule M, Optional Promotional Commercial and Industrial Gas Rate

A public hearing was held July 1, 1940, on D.P.U. 6085, which was adjourned to September 9, 1940, at which time D.P.U. 5975 was joined with D.P.U. 6085. After a public hearing held thereon hearings were closed and the subject matters were taken under advisement by the Department.

It was agreed at the hearing between the parties of interest, with the consent of the Department, that the city file a report, drafted by its expert, which was marked "Exhibit I," and that the company also file its report, which was marked "Exhibit 2," and that these exhibits as filed be considered as containing the subject matter which, if called upon, the experts preparing them would testify to under oath. It was further agreed by and between the parties of interest hereto, and with the consent of the Department, that comments on Exhibits 1 and 2 be submitted to the Department for its consideration in reaching a determination.

Exhibit 2, commencing on page 3, points out the two major difficulties experienced by Lynn's gas business in the following language:

"1. The bulk of the domestic gas customers are convenience users and are served at a loss, which in its total is a large annual sum. Customers using 2,000 cubic feet per month or less include 77 per cent of all domestic users.

2. Use of gas for hot water heat-

ing, refrigeration, kitchen heating, and central house heating is meeting increasing resistance because the prices offered for large use by the present promotional gas rates in Lynn are not sufficiently low to meet competition effectively."

It is contended that the schedules of rates and charges for gas filed by the company, the operation of which had been suspended by orders of the Department (D.P.U. 6085) will correct defects in the rate structure, thus giving to the company a more equitable return on its investment by permitting it more nearly to meet the prices charged for competitive fuels, the distribution of which is not regulated as a public utility. It is believed by the company that the new schedules would result in a more equitable distribution of the cost of gas service whereby so-called convenience users, as such, would be required to assume their responsibility of costs, that a greater use of gas by the larger and paying users would be promoted by relieving inequities and in effect would save, for the future, gas as a commodity, a utility, and an industry.

Exhibit 1 includes a study by the city of the operating expenses, annual depreciation allowances, allocation of charges between gas and electric operations, rates of return and other data which it is contended affects rate structures generally. In its exhibit the city included an analysis of the company's operating records for 1939 to determine (1) the allocation of operating costs between gas and electric service; (2) major changes in demand for company's service during the year which would affect the total gross operating revenues; (3) changes in costs of basic materials purchased and quantities required which would affect operating costs; and (4) probable amount of taxes.

Exhibit 1 also points out that on the whole, with few minor exceptions, the commercial expenses of the company have been allocated, since 1937, on the basis of 35 per cent to gas and 65 per cent to electric service, and that this percentage is predicated upon the relative amount of revenue received from gas and electric sales, and since the number of gas and electric metered consumers is practically the same in the entire system it does not reflect the actual expenses incurred. Property of the company jointly used is allocated on 50 per cent basis to each service, which appears to be a reasonable basis of allocation.

The city in dealing with the schedules of rates and charges for gas filed by the company pointed out that on the basis of the figures which it provided, the average household use of gas was 18,780 cubic feet yer year or approximately 1,500 cubic feet per month, and that under the present rates for gas, in comparison with seventeen other gas companies in the commonwealth, the Lynn rate was considerably below the average rate of the seventeen companies, but in most cases it was equal to or slightly higher than the lowest rates listed.

It is pointed out by the city that a reduction of $163,900 in electric rates can be effected in total gross revenues for the combined plant on the basis of estimated operation for 1940 as follows:

	Estimated 1940
Net Income	$982,900
Dividends	819,000
Reduction	$163,900

Plus	Estimated 1940	Estimated 1940 after Suggested Reduction of $163,900 in Electric Rates
Net Income		
Gas	$219,000	$219,000
Electric	763,900	600,000
Total	$982,900	$819,000
Depreciated Book Cost, 4 per cent compound interest method		
Gas	$4,704,821	$4,704,821
Electric	8,761,549	8,761,549
	$13,466,370	$13,466,370
Rate of Return		
Gas	4.65%	4.65%
Electric	8.72	7.00
Average	7.30%	6.08%

The above estimate is arrived at in the main by a revision by the city in the company's charges for depreciation and uncollectible operating revenues.

The estimated percentage of return on the gas property is 4.65 per cent, which is equivalent to 3.97 per cent on total plant cost, and which unquestionably led to the following statement appearing on page 58 of Exhibit 1:

"On the basis of the above rates of return, it is apparent that there is little likelihood of effecting any reduction in gas rates and that the reduction of $163,900 as previously noted would apply to electric rates. This will produce an average reduction of approximately 6 per cent in electric rates.

"Comparative statements show that the present gas rates are among the lowest for representative companies in Massachusetts. Any review of these rates by the Department of Public Utilities is likely to result in an increase to the 'convenience consumers' as previously noted in connection with the rates of the Boston Consolidated Gas Company."

The company is of the opinion that a reduction in electric rates in the amount of $163,900, which the city contends is a reasonable reduction, is not only an amount not properly substantiated, but in addition would seriously impair a continuance of sound managerial policy in that a proper depreciation reserve to care for obsolete or worn-out equipment would be discontinued, and that the $84,000 of the amount appropriated in 1939 to cover uncollected operating revenues cannot be termed as nonrecurrent and therefore used, as argued by the city, to aid in accomplishing rate reductions.

The company serves the city of Lynn and the towns of Nahant, Saugus, and Swampscott with gas and electricity. It serves the towns of Marblehead and Lynnfield with gas only. On December 31, 1939, there were 42,177 electric meters and 42,024 gas meters in service.

The combined plant investment of the company, as shown in the annual return on file with the Department for the year ending December 31, 1939, was $16,406,008.71. The investment in electric plant was $10,622,407.86 and the gas plant $5,783,600.85. The company had outstanding on December 31, 1939, common stock of the par value of $4,095,000 with premiums paid in thereon of $6,149,731.25, which together total $10,244,731.25. No bonds or notes were outstanding as of that date. The gas and electric depreciation reserves totaled $4,127,981.72. In addition to the regular depreciation reserves the company had reserves of $277,233.23 for the retirement of general equipment. The profit and loss balance of the company as of the same date was $1,134,257.90 and the surplus invested in plant was reported as $2,025,763.74.

The net earnings of the company for the year 1939 from gas operations were $159,917.12 which together with those from electric operations of $671,367.47 made the total net earnings for the year $831,284.59. These earnings represent a return on the par value and premium of the capital stock of 8.11 per cent and of 6.93 per cent if based on the plant investment less the depreciation reserves. The net earnings from gas operations of $159,917.12 represent a return of 4 per cent and the net earnings from electric operations of $671,367.47 a return of 8.38 per cent on the respective plant investments less the depreciation reserves.

The gas business of this company, characteristic of all gas companies in the commonwealth, has suffered severely from the competition of fuel oil for house heating, kitchen heating, and hot water heating. The earnings of the company from its gas operations in 1939 of $159,917.12 show a decrease of approximately $260,000 from the earnings in 1932 of $419,035.20. This decline in earnings is due principally to a decided drop in the sale of gas for household use and the lower unit prices received for gas under promotional heating rates. The following table shows the decline and change in the utilization of gas together with the lower average unit prices.

Sale of Gas for Domestic Use

	1930	1939
Household		
M cu. ft. sold	846,225	643,029
Revenue	$1,019,808	$765,496
Average revenue/M	$1.20	$1.19
House Heating		
M cu. ft. sold	119,533	142,610
Revenue	103,515	83,945
Average revenue/M	$.86	$.59
Kitchen Heating		
M cu. ft. sold	——	35,269
Revenue	——	33,071
Average revenue/M	——	$.94
Total Domestic		
M cu. ft. sold	965,758	820,908
Revenue	$1,123,323	$882,512
Average revenue/M	$1.16	$1.07

In an attempt to meet competition with other fuels, the company has developed and made effective in recent years optional gas rates of a promotional type for hot water heating, refrigeration, kitchen heating, and central house heating. Estimated reductions in gas rates totaling $62,200 per year have been made since 1935 in the company's endeavor to retain its load and permit it to compete with other fuels. By encouraging the use of gas for these several domestic purposes, in addition to cooking, the company has retained considerable business which otherwise would have been lost.

The bulk of the gas revenue of the

company is derived from the sale of gas on the regular rate for household and commercial use. This rate provides a charge of $1.20 per thousand cubic feet for the first 20,000 cubic feet of gas used per month; $1.15 per thousand cubic feet for the next 30,000 cubic feet, and $1 per thousand cubic feet for all gas used over 50,000 cubic feet per month.

The proposed rates offer in the first step 200 cubic feet of gas at the net price of 75 cents, with a substantial reduction in unit prices for gas used in excess of 2,000 cubic feet per month, resulting in reductions to domestic customers now being served on Schedules I and J using in excess of 3,700 and 2,800 cubic feet per month respectively. In the three schedules as filed the charges for the first 2,000 cubic feet of gas consumed per month are identical; after 2,000 cubic feet the rate varies in a promotional manner in accordance with the type and kind of service for which the gas is to be furnished.

It is estimated by the company that the proposed gas rates will result in an increase in the annual gross gas revenues of $105,000. The company estimates a loss of $10,000 from the discontinuance of gas service by a number of convenience users. They also contend that increased expenses of $57,000 will result from higher fuel costs, increased wages and taxes, together with decreases in revenue from the sale of residuals. Exception was taken to several of these items by the city but in the aggregate the exceptions do not detract from the fact that the increases proposed in rates will not be reflected in a like increase in net earnings unless substantially greater sales of gas develop from the new promotional rates.

In our opinion the present regular gas rate which has been in effect since 1925 is not promotional in character and is lacking in the necessary features to attract greater use and it would seem that unless revision of this rate is made the result will be a further decline in the earnings from gas operations. The proposed new rates as filed we believe will enable the company to further promote the sale of gas in its effort to stay the decline in its gas revenues and earnings.

The reduction of $163,900 per year in electric rates requested by the city is reached by suggesting a downward revision of $100,625 in the annual charge for depreciation and by the elimination of $84,100 from the company's charge for uncollectible operating revenues. This latter sum is based on the charge made in 1939 for uncollectibles being in excess of the average of such charges for the last four years.

[2, 3] As a basis for reduction in the depreciation charge, the city's report contains depreciation studies and comparative figures with other companies in the commonwealth and states that the reserves are considerably higher than the average for the other gas and joint gas and electric companies, and slightly higher than the average for the electric companies. Without going into great detail about the given comparative figures, we nevertheless do point out that the inclusion in the tabulations of two of the largest companies with exceedingly low reserves, distorts the comparison. With the elimination of these two companies the reserves of the Lynn Company com-

pare favorably with the other companies.

The Massachusetts general court in 1921 recognized the necessity of adequate depreciation reserves and enacted legislation giving this Department authority to order an increase in depreciation charges if in its opinion such exsiting charges were found to be inadequate. (Section 5A, Chap. 155, G. L. Ter. Ed.) The Department has ordered frequently such increases in the past.

Depreciation charges for replacement of property may be made with some degree of accuracy but with everyday improvements being made in the electric industry and the continual studies for improvements in the manufacture of gas, the question of obsolescence in future years relative to both properties is of paramount importance and of serious consequence. Efficient management provides for such contingencies, and we believe that any reductions in rates brought about in part through a reduction in charges for depreciation unless such charges are extremely excessive would be contrary to sound regulation.

The decisions of the Department relating to depreciation and depreciation reserves are sound in requiring that adequate reserves be provided. This affords a protection to the investor in insuring his investment and at the same time benefits the consumer by limiting capital investment upon which dividends are paid.

The city's report relative to the excessive amount charged as uncollectible operating revenues we believe to be well founded.

[4] Under normal world conditions some justification would exist for a reduction in the electric rates of the company more nearly approaching the amount requested by the city. Present conditions are unsettled. It is extremely doubtful that the earnings of this company for 1939 are indicative of future earnings. In the brief filed by the company various known and estimated increases in electric operating costs totaling $63,500 were listed, resulting from higher fuel, labor, and tax charges. This amount does not include undetermined losses due to the abandonment of the Boston, Revere Beach, and Lynn Railroad and a decreased street lighting budget of $15,000 by the city of Lynn. Since the original estimate an additional increase of $30,000 will result from an increase to 24 per cent in the Federal income tax rate. An additional increase of $100,000 has resulted in a 1940 assessment of $180,733.34 in the state corporate franchise tax as against a similar tax assessment in 1939 of $80,652.67. The company has appealed this assessment but until a final determination is had thereon it must be considered as an item of expense in any revision of rates.

After giving due consideration to the facts presented we are of the opinion that the company can at this time reduce its rates, prices, and charges for electricity in the amount of $60,000 per year without seriously impairing its earnings, such sum approximated the estimated excess charged in 1939 for uncollectible operating revenues.

Concurring Commissioners: Cotton, Chairman; Curley and Whouley.

Accordingly, after notice, public hearings, investigation, and consideration, it is

Ordered, that the schedules of gas rates and charges filed by the Lynn Gas and Electric Company with the Department on May 14, 1940, to become effective on June 1, 1940, and identified as follows:

M.D.P.U. No. 41, Schedule I, Regular Gas Rate
M.D.P.U. No. 42, Schedule J, Optional Promotional Household and Building Heating Gas Rate
M.D.P.U. No. 43, Schedule M, Optional Promotional Commercial and Industrial Gas Rate

the operation of which schedules was suspended by the Department by successive orders until January 1, 1941, be and hereby are approved to become effective January 1, 1941, and it is

Further ordered, that new schedules of rates charged for electricity effecting a reduction in the amount of not less than $60,000 per annum be filed with the Department by the Lynn Gas and Electric Company prior to January 1, 1941, to become effective on said date, subject to the approval of the Department, and it is

Further ordered, that the investigation by the Department upon its own motion as to the propriety of certain schedules of rates and charges for gas filed by the Lynn Gas and Electric Company (D. P. U. 6085) be and the same hereby is discontinued, and it is

Further ordered, that the petition of the mayor of the city of Lynn for a reduction in the rates charged for gas and electricity sold and delivered by the Lynn Gas and Electric Company in said city (D. P. U. 5975) be and the same hereby is dismissed.

ARIZONA CORPORATION COMMISSION

Re Tucson Rapid Transit Company

[Docket No. 2363-A-1245, Decision No. 12135.]

Monopoly and competition, § 62 — Motor carriers — Denial of certificate.

The Commission, believing its first duty to be to the general public, will not cancel an authority of an established transit company to serve a certain area with busses, at a competitor's request, where the protestant is not equipped or prepared to give the service which the people desire and would not, if granted the authority, undertake to give service at the fair rates being charged by the existing carrier.

[September 23, 1940.]

PETITION *that authority heretofore granted to another carrier to serve a certain area be canceled and set aside; denied. Rehearing denied October 10, 1940.*

APPEARANCES: John H. Rapp and Otho Books, for Mt. View Bus Line, protestant; Geo. R. Darnell, of Darnell, Pattee & Robertson, for Tucson Rapid Transit Co.

By the COMMISSION: About fifty years ago the Tucson Rapid Transit Company established electric street car service in the city of Tucson. This service was continued until the year 1934 at which time automotive bus service was substituted, hence it has served the people in this capacity for more than half a century. For a great many years it was the only medium of transportation available and it follows that its field of operations covered the entire city.

According to the 1940 Census, Tucson, including its metropolitan area, is a city of about 65,000 people. There are several closely built-up districts immediately adjacent to the city limits. Through coördinated service, transfer privileges are granted which enables the public to move between widely separated portions of the city on a single fare. In this respect and in point of frequency of service it is in fact able to furnish a specialized service not available at the present time through any other medium. It also maintains fares that are lower than fares offered by any other operator.

On February 24, 1936, in Docket No. 6643–A–4548, J. M. Bingham applied to the Commission for permission to establish and operate a bus line for the transportation of passengers between Tucson and certain rural districts, principally the Fort Lowell and Amphitheater Districts, located outside of the city limits of Tucson. After a hearing, in which taxi and other operators participated, in which it was stipulated that applicant Bingham did not desire to and would not, if his application were granted, engage in intracity service, a certificate of convenience and necessity covering the proposed route was issued. The route covered a distance of about 10 miles for the round trip and a fare of 15 cents was established. Thereafter, Bingham attempted to expand his service into other fields, specifically the San Xavier Mission, the Ball Park, and Colossal Cave. All of these services were later abandoned and discontinued.

In many ways and on various occasions the Commission earnestly sought to be helpful to Mr. Bingham both for his own benefit and to the end that the public service might possibly be improved. Notwithstanding this fact, the record in several formal and informal cases clearly shows that he failed and refused to observe the laws and the rules and regulations of the Commission.

On October 30, 1937, the Commission received from the Tucson Rapid Transit Company a request for permission to extend its scheduled service for a distance of about three blocks into what is known as the Jefferson Park area. A check of our records by the chief clerk of the motor vehicle division disclosed that the proposed extension was upon and over streets which were not then accorded service, and authority was granted for the applicant to immediately commence and give the desired service for which the people of that district were petitioning. We think that our action was justified both by law and by the needs of the com-

munity. Our position is fully sustained by the provision of law, § 706 of the Revised Code of 1928, relating to the granting of certificates of convenience and necessity to utilities generally which reads in part as follows:

"This section shall not require any such corporation to secure such certificate for an extension within any city, county, or town within which it shall have theretofore lawfully commenced operations, or for an extension into territory either within or without a city, county, or town contiguous to its street railroad or line, plant, or system, and not theretofore served by a public service corporation of like character, or for an extension within or to territory already served by it, necessary in the ordinary course of its business."

Through counsel, Bingham petitioned the Commission to set aside its order authorizing the extension of the Tucson Rapid Transit into the Jefferson Park District. Extensive formal hearings were held on this petition and other matters before the Commission in which both the Tucson Rapid Transit and Bingham were represented, in the courtroom at Tucson, commencing at 10 o'clock A. M., September 25, 1939. The record disclosed conclusively that Bingham was not equipped or prepared to give the service in the Jefferson Park area for which the people had petitioned and to which they were clearly entitled and that he could not and would not, if granted the authority, undertake to give service at the fares which were being charged by the Tucson Rapid Transit.

It would be ridiculous and contrary to public policy to assume or contend that the right of ingress and egress into and out of the city of Tucson acquired by Bingham incident to his service to rural communities would automatically prevent the use of other streets of the city by the Tucson Rapid Transit Company or any other operator whose services might be required to handle the traffic of a growing city. His rights must necessarily be confined to the particular streets covered by his certificate unless and until they are modified in a lawful way.

We have never departed from the position that the first duty of this Commission is to the general public and so far as we are concerned, we are not going to do so in this case. The people of Jefferson Park area are entitled to the lowest possible fares and the greatest frequency of service and we shall not penalize them by ordering the discontinuance of superior service to the end that another operator may be financially benefited. We are not willing to say that in a great and populous city like Tucson the public welfare shall be submerged to the selfish interests of someone using the streets and highways for profit.

Industrial Progress

Selected information about manufacturers, new products, and new methods. Also news on utility expansion programs, personnel changes, recent and coming events.

Buffalo-Niagara Plans $13,463,870 Program

THE Buffalo-Niagara Electric Corporation has embarked on a $13,463,870 construction program which will require two years to complete.

The new construction includes a 80,000-kilowatt, 60-cycle generating unit at the Huntley steam station at Buffalo, at an estimated cost of $6,508,600. More than $4,000,000 is earmarked in the company's program for expansion and improvement of its distribution system.

J-M Opens New Southern Industrial Department

A NEW industrial department office has been established by Johns-Manville to facilitate service to the South's rapidly growing industry, according to an announcement by Lewis H. Brown, J-M president. The new district, with headquarters at Atlanta, Georgia, will serve the states of Georgia, Tennessee, North Carolina, South Carolina, Florida, Alabama, and Mississippi.

The new district is headed by Thomas J. Roberts, formerly assistant to T. K. Mial, J-M vice president in charge of sales to industry and product development for general industrial use, with headquarters at New York. A graduate of Cornell University, Mr. Roberts has been with the power products and industrial department of Johns-Manville since 1925.

Kelvinator Drops Washers

THE Kelvinator Division of Nash-Kelvinator Corporation has discontinued the manufacture of home laundry equipment and is now disposing of its remaining stock of washers and ironers, according to a recent announcement. The company is concentrating on fewer products, having dropped its air-conditioning division in 1940. Last year it enjoyed excellent success with refrigerators and this year hopes to achieve similar results on ranges.

Fluorescent and Incandescent Lamp Sales Increase

EXPENDITURES for electric fluorescent lamps and fixtures and their installation this year will approximate $250,000,000, it is estimated in the trade, against $100,000,000 in 1940, according to recent reports. In some quarters it is predicted that expenditures will continue to increase rapidly until the billion-dollar figure is reached.

Thus far, increased use of fluorescent lighting has not halted expansion of incandescent lamp sales. Last year, about 600,000,000 bulbs were sold, a gain of 75,000,000 over 1939. Total output of flourescent lamps in 1940 did not quite attain 10,000,000.

New Electric Home Items Offered by G-E

NEW items and improved appliances for the electric home have been announced to dealers recently by the General Electric Appliance and Merchandising Department, Bridgeport, Conn.

Seven entirely new electric ranges for 1941, not only offer features and styling calculated to extend the swing to electric cookery so pronounced in 1940, but offer an unusual example of consumer and retailer coöperation. "Back seat engineers"—the wholesalers and retailers who sell and service electric appliances and the housewives who use them—were mobilized to assist the factory in planning the new line, and the models have literally been designed by the field, according to J. R. Poteat, manager of the G-E range and water heater section.

The most outstanding result of this coöperation has been the production of three models which will be priced at less than a hundred dollars, and of four others which combine more features and notably reduced prices when compared with comparable models in previous years.

Without making changes in the electric dishwasher or the disposall for 1941, G-E has introduced new products and features into its electric sink and cabinet lines calculated to increase notably the whole electric kitchen market during the year, both in respect to new installations and to modernizations of existing kitchens. Principal items that have been presented to dealers by C. W. Theleen, manager of the G-E electric sink and cabinet section, are a new non-electric cabinet sink designed for later inclusion of dishwasher and disposall, an adapter flange making easy the

installation of a disposall in a standard sink, and a new refrigerator storage cabinet. Custom sink and counter tops with linoleum in eight standard colors, and three smaller utility cabinets were also shown.

G-E laundry equipment features a new one-control wringer, four wringer-type washers which are entirely new, two spinner-type washers recently added, two electric dryers of the tumbler type of which one is new, and four ironers—the exclusive flatplate and three rotary types. Close attention has been given to step-up features in the washer line, and the fresh styling evident results mainly from the incorporation of the new massive wringer, new legs, and a deep skirt. Other washer features are the use of steel-cut gears, a new type of activator control that is waist-high and operated like an automobile gear shift, sediment drain channels in the tubs, and a fingertip-control pump. The finish employed on the new models is of Polymerin, which resists discoloring, fading and chipping.

The automatic blanket, subject of limited production and sales by General Electric in the last four years, has undergone improvements based on studies of performance in several thousand homes throughout the country and is now being marketed as a single, standardized product, available in five different colors.

Home Lighting Contest

A TOTAL of $1,000 in cash prizes will be awarded utilities for outstanding achievements in promoting or selling home lighting equipment or both, during the first six months of 1941, by the Home Lighting Equipment Sales Committee, EEI. There will be a first award of $500, second award of $200, third award of $100 and four awards of $50 each.

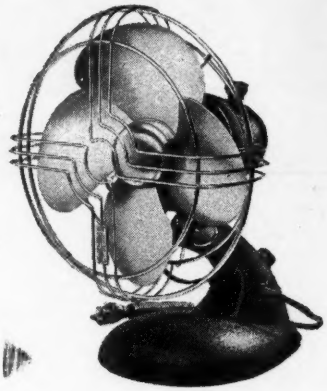
Activities may be conducted by the utility only, by utility and dealers, or for dealers only. Campaigns may cover the promotion and sale of IES lamps, pin-to-wall lamps, other portables, lighting fixtures, adapters, converters and modernizers, all equipped with proper size bulbs, either singly or in any combination of these types.

Judges will consider, among other phases of the activities, the ingenuity of sales promotion and advertising, completeness of sales training and programs, and scope of activities. The effectiveness of the plans, unit sales in relation to total domestic customers, and the load building value of equipment sold will also be included.

Activities entered in the contest must take place between January 1 and June 30, 1941. A guide sheet with additional information will be sent upon request to utilities entering the contest. Address Home Lighting Equipment Sales Committee, Edison Electric Institute, 420 Lexington Ave., New York City.

K-M 1941 Fans

A NEW 16-inch oscillating two-speed fan [illustrated] is a 1941 addition to Knapp-Monarch's line of Jack Frost electric fans. New also, in K-M's KoldAir line is a 10-inch, 4-pole-motor rubber-bladed fan. All K-M



fans for 1941 include many mechanical improvements and new features of design. The eleven fans in the Jack Frost line cover a list spread of from $4.95 to $35, according to a recent announcement by the manufacturers.

Inspection of Fire Extinguishers

THE Safety Research Institute, 420 Lexington Ave., New York, N. Y., has issued a report on Maintenance of Hand Fire Extinguishers, giving directions for inspecting and recharging extinguishers. The report points out that fire extinguishers, to be instantly available for use at all times, must be properly recharged and inspected. The date of recharging should be noted on the tag provided for that purpose, along with the name or initials of the man doing the work.

Fire insurance underwriters recommend that only recharging materials and replacement parts furnished by the manufacturers of the extinguishers be used in service work. Full instructions for recharging the various types of extinguishers are given on the labels and they should be followed to the letter.

New Water Filter

A NEW water filter, known as Model CPHLS has been developed by Staynew Filter Corp., Rochester, N. Y.

Construction is simple and filtering action

Q. How can I cut my hauling costs?

A. Look and Save! Buy the One-Two-Three Way...

COMPARE TRUCKS—Here's a suggestion that's as free as the air you breathe. And it can save you some money . . . maybe a *lot of money!*

Buy your trucks the one-two-three way! In other words, before you lay your money on the line for any truck, look at Dodge Job-Rated trucks.

COMPARE QUALITY—Check and compare all important truck units. Be sure they're the *right* quality and the *right* size in the truck you buy . . . built for the job . . . to stay on the job . . . to save you money

They will be *right* in a Dodge Job-Rated truck . . . because that's what "Job-Rated" means . . . trucks *built to fit the job!*

When you pay for quality, *get quality* . . . Dodge quality . . . *built-to-last quality* . . . in design, materials and workmanship.

You don't have to pay extra money for such a truck, because Dodge Job-Rated trucks are priced with the lowest. See your Dodge dealer now for a "good deal."

DEPEND ON DODGE *Job-Rated TRUCKS

*Job-Rated MEANS A TRUCK THAT FITS YOUR JOB

Better BECAUSE OF CHRYSLER CORPORATION ENGINEERING

PRICED WITH THE LOWEST

Chassis .. $500 AND UP (WITH COWL)
Chassis .. $595 AND UP (WITH CAB)
Pick-Ups $630 AND UP
Panels .. $730 AND UP
Stakes .. $740 AND UP

Above prices are delivered at Detroit, Federal taxes included. Transportation, state and local taxes (if any) extra. All prices shown are for ½-ton except stake model which is for ¾-ton. 112 standard chassis and body models available.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

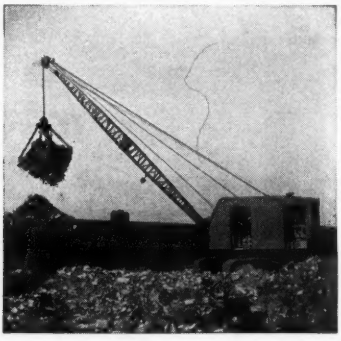
DODGE DIVISION, CHRYSLER CORPORATION, DETROIT, MI

positive—all water passing through special fabric filter mediums possessing the advantages of high efficiency plus minimum restriction to water flow—advantages which are increased by the radial fin construction. This construction permits a large area of filtering medium to occupy a relatively small space.

¾-Yd. Convertible Shovel

A NEW, lightweight ¾-yd. convertible shovel-dragline-crane, Model 75, is announced by Link-Belt Speeder Corp., Chicago, as a companion to its popular LS-85 heavy-duty ¾-yd. machine.

All-welded steel construction has replaced castings in the new "75." The power plant is a



The new lightweight Link-Belt Speeder Model "75" Convertible Shovel, Dragline, Crane.

heavy-duty gasoline or Diesel engine with smooth-running roller chain drive. Alloy steel, machine-cut spur gears drive the reverse and drum shafts. These turn in heavy bronze bearings.

Working ranges, clearances and lifting capacities are given in a new folder sent upon request. A copy may be obtained by referring to Model "75" and addressing the manufacturer or his nearest distributor.

Coffin Foundation Awards

CHARLES A. Coffin Foundation awards were made recently to 25 employees of the General Electric Company, recognizing them for outstanding contributions made last year to the progress of the company and the electrical arts. The awards were made for 21 distinct accomplishments, four of them were joint awards to two employees. Eleven were factory workers, 10 were engineers, three were administrative or clerical employees and one was a salesman. Since the Foundation was established 18 years ago, 555 employees have been singled out to receive annual awards.

Outstanding in general interest was the award made to Horace S. Hubbard of the company's Pittsfield (Mass.) works for development and design of a 1,400,000 volt direct-current generator for the National Bureau of Standards in Washington. The generator, described by Dr. Lauriston Taylor, director of the bureau as "the first real piece of equipment I ever had," provides power for a 1,400,000 volt X-ray tube, also made by General Electric and in daily use by the Bureau for standardization tests and precise research on X-ray dosage problems.

The Coffin Foundation was established as a tribute to the memory of Charles A. Coffin, founder of the General Electric Company and its first president.

Instrument Measures Oxygen In Any Gas

A COMPLETELY automatic Oxygen Recorder is announced by the Cambridge Instrument Co., New York, N. Y. No chemicals are used with this instrument. It operates from the electric supply line and provides continuous indication and graphic record of the amount of oxygen in any gas. In power plants, the determination of combustion efficiency by measuring excess oxygen is a more fundamental method than that using CO_2 indication. The standard range is 0 to 5 per cent Oxygen on a 10 in. scale, but the instrument can be scaled in ranges of 0 to 2 per cent Oxygen full scale and 0 to 100 per cent Oxygen full scale.

Determinations by this Oxygen Recorder are not affected by variation in the constituents of the sample gas because a differential measurement is performed. Various analyzing cells may be combined so that the instrument will provide a complete gas analysis on one chart.

Manufacturers' Notes

Parker to Direct CP Range Program

Alton B. Parker has been appointed national sales counsellor for the Association of Gas Appliance and Equipment Manufacturers, according to an announcement by Alan P. Tappan, chairman of the Domestic Gas Range Division and vice president of Tappan Stove Co., Mansfield, Ohio.

Mr. Parker, formerly in charge of dealer sales development and dealer relations for the United Gas Corporation in Texas, will direct the CP gas range program in the field, speaking to dealer and utility salesmen and consumer groups, and aiding the department stores in the merchandising of CP gas ranges. The program is sponsored by more than 20

Manufacturers' Notes (cont'd)

leading gas range manufacturers, tying in cooperatively in sales promotion and advertising for CP gas ranges.

G-E Promotions

C. I. MacGuffie has been appointed manager of sales, Electric Welding Section of the General Electric Company, according to an announcement by J. E. N. Hume, commercial vice president of the company. Mr. MacGuffie succeeds L. D. Meeker, now associated with the Smith-Meeker Engineering Company, New York City.

B. M. Tassie, a leading executive in the electrical appliance industry for the past decade and closely associated with the industry for a quarter of a century, has been appointed manager of appliance sales for the newly consolidated Pacific district of the General Electric appliance and merchandise department, with headquarters at San Francisco. Mr. Tassie has been president of Manning, Bowman and Co., electrical appliance manufacturers, for the past ten years.

Elliott Harrington has been appointed sales manager of the General Electric air conditioning and commercial refrigeration department at Bloomfield, N. J. John P. Rainbault, the manager, announced recently. Mr. Harrington has been associated with the air conditioning and automatic heat activities of the company since they were started and has served in various engineering and sales capacities.

I.B.M. Promotes Packard

International Business Machines Corporation recently announced the promotion of Gordon Packard to the newly created position of general sales manager. He will be in charge of the sales cativities of all divisions of the company, with headquarters in New York.

Mr. Packard was previously sales divisional manager with headquarters in Chicago, and prior to that he was district sales manager for the Pacific Coast division with headquarters in San Francisco. He had charge of sales of all IBM products in the Pacific Coast territory.

Equipment Literature

Ball Bearing Units

The Stephens-Adamson Manufacturing Company, (Bearing Division) Aurora, Ill., has issued a new Sealmaster Ball Bearing catalog No. 840.

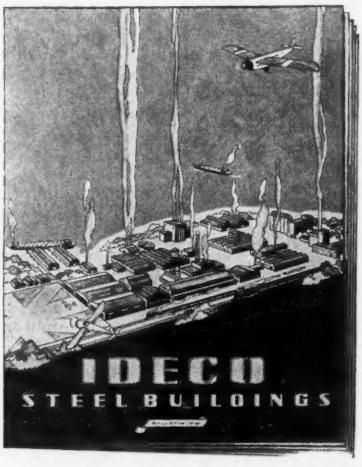
The 32-page publication describes the company's complete line of advanced designed bearing units, which are pre-lubricated, self-aligning, and feature the permanent Sealmaster Centrifugal labyrinth seal. This type of seal effectively keeps out dirt and retains lubricant according to the manufacturer.

In addition to giving a detailed description of various units, a considerable amount of engineering data are contained in this publication, including tables of load ratings for normal, standard and medium duty units. Dimension tables with price lists are given for the various types of pillow blocks, flange, take-up and cartridge units and bearings. Typical Sealmaster applications are illustrated.

IDECO Steel Buildings

A new catalog showing types, construction details, typical applications and specifications of IDECO Steel Buildings is being distributed by International Derrick and Equipment Division of International-Stacey Corporation of Columbus, Ohio.

Information contained in this new catalog will be found valuable by anyone interested in



either permanent or temporary buildings for industrial expansion, air-port buildings, storage space, buildings for field operations and a wide variety of housing needs.

The many illustrations showing applications and the careful reproduction given all details, together with the condensed specifications and other data contained in the catalog, greatly simplify the selection of building types.

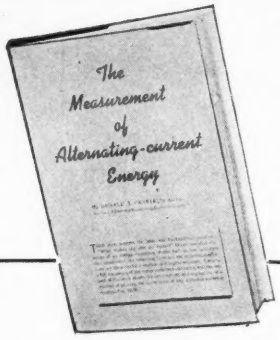
A copy of the catalog may be secured by writing to the company.

Electric Fly Fighter

Chicago Electric Scientific Company, Chicago, describes "Cesco" electrified fly screens and traps as the easiest, cheapest and most effective way to keep premises free of flies and other insects.

A bulletin illustrating electric fly traps and screens points out the effectiveness and inexpensiveness of this new way of fighting flies and insects and its adaptability for use by stores, resorts, markets, restaurants, institutions, farms, etc.

A copy of the bulletin may be secured from the manufacturer.



A new book for metermen

TELLING HOW TO measure alternating-current energy with the induction watt-hour meter

Make the information on metering in this practical new book bring you real profit . . .

You know your job. But the more you know about it, the more you know about the tools you work with, the more you know about attacking and solving properly special problems in your line—the more valuable you are as a man and as an employee.

THESE TEN PRACTICAL CHAPTERS WILL HELP YOU

- **Early History of the Watt-hour Meter Art.**
- **Elemental Theory of Torque Production.**
- **Essential Elements of the Watt-hour Meter.**
- **Application of the Essential Elements in Modern Meters.**
- **Watt-hour Constants; Gear and Register Ratios.**
- **Vector Analysis of the Induction Watt-hour Meter.**
- **Compensation of Errors.**
- **Polyphase Metering.**
- **Analytical Checking of Metering Schemes.**
- **Metering Special Circuits.**

This informative book answers for metermen the following questions:

1. **What makes the disk in a meter go around?**
2. **How can this revolving disk be made to measure energy?**
3. **What metering scheme should one use to measure the energy in a particular circuit?**
4. **How may one be sure that all the energy in such a circuit is metered by the particular scheme chosen?**

The presentation is based throughout on the author's long experience in teaching metering principles to groups and special classes of metermen.

THE MEASUREMENT OF ALTERNATING-CURRENT ENERGY

BY DONALD T. CANFIELD

Associate Professor of Electrical Engineering, Purdue University

210 pages 5½ x 8, 74 illustrations $2.00

THE book begins with an outline of the development of the principles of metering. It then provides an answer to the question: What are the ways and means, together with their modifications, of producing a torque on a rotatable member by electromagnetic means?

After showing the possibilities of producing rotation in a disk by electromagnetic means, it explains why such motion must have a purpose. Then follows a discussion of the remaining essentials of an energy meter and the application of these essentials in modern meters.

Meter constants and methods of compensation are covered in considerable detail. Also a method is developed and applied for checking the correctness of a proposed metering scheme to ascertain whether or not the proposed meter will or will not record all the energy passing through the metering point.

Send check, money-order or cash to

PUBLIC UTILITIES FORTNIGHTLY

MUNSEY BLDG., WASHINGTON, D. C.

200,000 Products Grandpa Never Had

FOUL SMELLS and commotions—that, to most of us, is a good summary of the mystic fields of Chemistry and Physics. Their lingo — phenol, butyl alcohol, trinitrotoluol, isopropyl spirits—is something to use in cross-word puzzles.

We let the practitioners of the modern Black Arts cheerfully alone, knowing in due time that it will all make sense. The day invariably comes when we get a new radio tube, a new medicine, clothing of glass, hats made of milk, cold light, air-conditioned rooms —all the every day products which to grandfather would have been 200,000 miracles.*

The only tragedy is that we take so much for granted. We are all quite sure that our grandchildren will see 200,000 *more* miracles.

But that's not necessarily true. These miracles of the past and those of the future come from a happy combination of "foul smells and commotions" with a peculiarly American miracle—the American Free Enterprise System.

The miracles of America don't come from the marble halls of the District of Columbia. They happen in the brains and spirits of free men working together.

When you hear men say we need more laws, more restrictions, more dictocracy, you are listening to men who have lost faith in America. They will stop the miracles to come, as their way of thinking would have stopped the 200,000 grandpa never saw.

So listen instead to those who want America to go ahead. Business is *for* more things for more people. So What Helps Business Helps Us All.

**Write for "The Case for Industrial Chemistry" enclosing 10 cents to cover costs.*

This message is published by

NATION'S BUSINESS

It is the 46th of a series contributed toward a better understanding of the American system of free enterprise. If you'd like to express your views on the American Way why not write to your Congressman or Senator?

PROFESSIONAL DIRECTORY

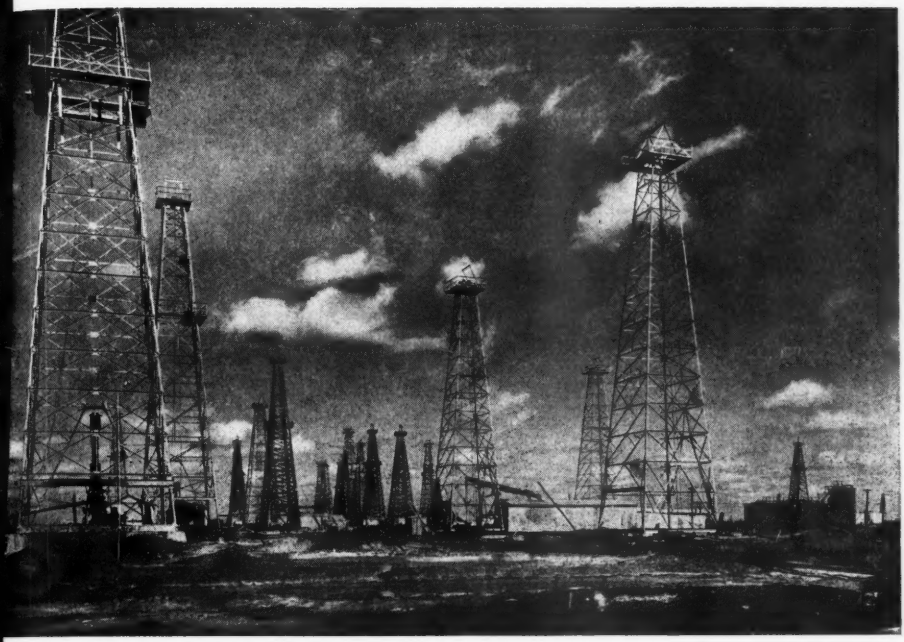
• This Directory is reserved for engineers, accountants, rate experts and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, design and construction.

PROFESSIONAL DIRECTORY (*continued*)

INDEX TO ADVERTISERS

[The Fortnightly lists below the advertisers in this issue for ready reference. Their products and services cover a wide range of utility needs.]

*Fortnightly advertisers not in this issue.



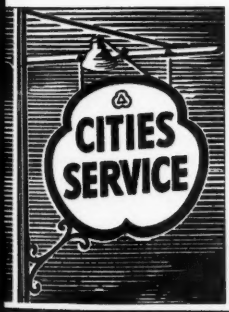
NATIONAL DEFENSE NEEDS MORE THAN "ELBOW GREASE!"

Industrial lubrication, as exemplified by the role of Cities Service, plays a vital part

Lifeblood of the factory line is the precious oil that keeps the wheels of industry turning . . . spinning ever faster and faster as tanks, ships, planes and trucks spring from blueprints into cold steel.

In many phases of national defense, Cities Service's industrial oils have been called upon to help deliver maximum efficiency of operation.

We are honored by our selection, feeling that it indicates more plainly than words that we are qualified to meet the lubrication problems of industry. The vast experience of our Lubrication Engineers is available for consultation without cost. All you have to do is get in touch with us at any of the offices listed below.



CITIES SERVICE OIL COMPANIES

CITIES SERVICE OIL COMPANY — Chicago, New York, Cedar Rapids, Boston, St. Paul, Grand Forks, Kansas City, Fort Worth, Oklahoma City, Milwaukee, Cleveland, Detroit, Syracuse.

CITIES SERVICE OIL COMPANY, LTD. — Toronto, Ontario.

ARKANSAS FUEL OIL COMPANY — Shreveport, Little Rock, Jackson, Miss., Birmingham, Atlanta, Charlotte, N. C., Nashville, Richmond, Miami.

"Ma Says It Tastes of Coal Oil!"

MA IS probably right. The clerk who had to fit shoes and horse collars, measure out nails and draw kerosene couldn't always stop to wash his hands before he handled the butter and crackers. And every so often the potato on the spout of the oil can would joggle off.

Today, for most of us, the mixture of food and kerosene odor has ceased to be a problem. More and more of our food, packed by electric machines, comes to us in sanitary containers. Electricity does the work, too, of washboard and carpet beater. Automobiles and good roads have shortened distances to town and work. And because so many of the routine, unpleasant jobs which occupied our parents' time are now only memories, we have more opportunities for enjoying life.

Practically every industry in America has helped to bring about this progress. And every industry, in doing so, has made use of the economies and manufacturing improvements that electricity brings. General Electric scientists, engineers, and workmen have been, for more than 60 years, finding ways for electricity to help raise American living standards—to create More Goods for More People at Less Cost. Today their efforts are helping further to build and strengthen the American way of life.

G-E research and engineering have saved the public from ten to one hundred dollars for every dollar they have earned for General Electric

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